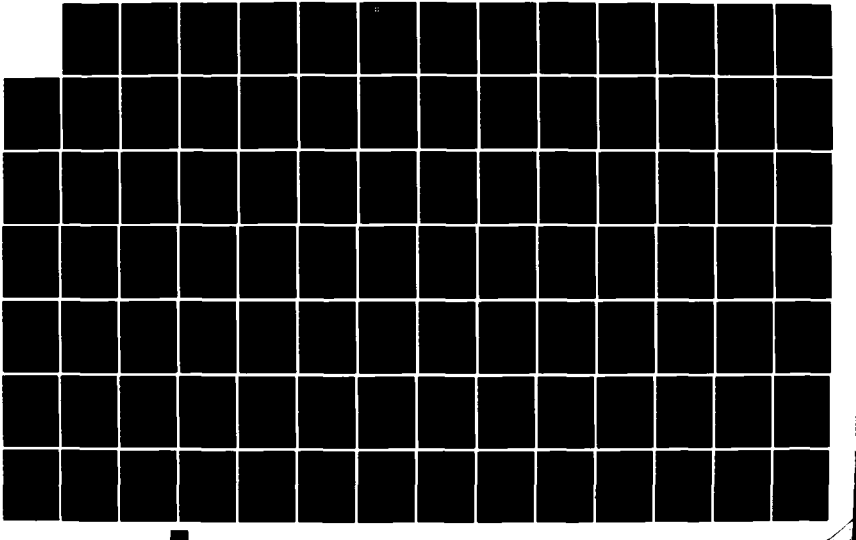
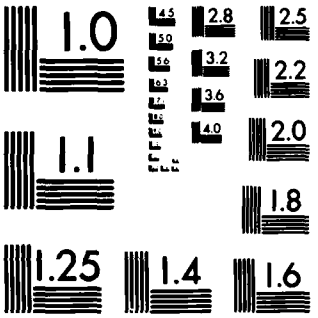
AD-A145 077 HOW TO EVALUATE TRAINING(U) IMPERIAL IRANIAN GROUND FORCES COMBAT RESEARCH AND EVALUATION CENTER 30 SEP 82 DAAG29-18-D-0100 1/4

UNCLASSIFIED F/G 5/9 NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

AD-A145 077

June 1983

Project 162

HOW TO EVALUATE TRAINING

Prepared for:

U. S. Army
Training Developments Institute

By:

Information Mapping, Inc.

1050 Waltham Street, Lexington, MA 02173 (617) 861-1730

DTIC FILE COPY

DTIC
ELECTE
SEP 5 1984
S D
D

84 08 31 021

SECURITY CLASSIFICATION OF THIS PAGE *(When Data Entered)*

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER	2. GOVT ACCESSION NO. A145077	3. RECIPIENT'S CATALOG NUMBER
4. TITLE *(and Subtitle)* How to Evaluate Training		5. TYPE OF REPORT & PERIOD COVERED 6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) Information Mapping, Inc.		8. CONTRACT OR GRANT NUMBER(s) DAAG 29-81-D-0100
9. PERFORMING ORGANIZATION NAME AND ADDRESS Information Mapping, Inc. 1050 Waltham Street Lexington, MA 02173		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS Training Developments Institute ATTG-UI Ft Monroe, VA 23651		12. REPORT DATE 30 Sep 82 13. NUMBER OF PAGES 387
14. MONITORING AGENCY NAME & ADDRESS(*if different from Controlling Office*) See 11.		15. SECURITY CLASS. (*of this report*) Unclassified 15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT *(of this Report)*
Approved for public release; distribution unlimited.

17. DISTRIBUTION STATEMENT *(of the abstract entered in Block 20, if different from Report)*

18. SUPPLEMENTARY NOTES

19. KEY WORDS *(Continue on reverse side if necessary and identify by block number)*
training
evaluation
analysis
questionaire

20. ABSTRACT *(Continue on reverse side if necessary and identify by block number)*
This paper was based on the ARI-produced evaluation job aids for the M-1 Training Effectiveness Analysis, written by Mr. Donald Kristianson and Mr. Bobby Witmer, ARI, Ft Knox, KY 40121. The paper assists an individual with how to: a. evaluate a training program b. observe training c. collect data d. analyze test score data e. develop questionnaires.

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

SECURITY CLASSIFICATION OF THIS PAGE *(When Data Entered)*

THE TRAINING PROGRAM EVALUATION

PREFACE

Introduction

Every job in the Army is made up of a set of tasks which must be correctly performed. The purpose of training is to teach soldiers how to perform tasks and to make sure they are performed up to acceptable standards.

The problem

Experts who develop training are mainly concerned with subject matter. There is less concern for how the training is developed, conducted and tested. The result is training that does not always reach acceptable standards.

These training programs are usually not changed because they are not subject to a careful evaluation.

The solution

The four job aids contained in this manual provide specific techniques for evaluating different parts of a training program. Carefully used, they can significantly improve and upgrade the development, conduct and testing of training programs in the Army.

The job aids

Use the following table to determine which job aid to use.

IF you need to...	**THEN see...**
conduct an evaluation of a training program	Guidelines for a Training Program Evaluation.
evaluate • lesson plans or • training design	A Job Aid for Evaluating Lesson Plans.
observe • training sessions or • testing and performance	A Job Aid for Observing Training.

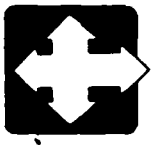
Continued on next page

Accession For
NTIS GRA&I
DTIC TAB
Unannounced
Justification
By
Distribution/
Availability Codes
Dist | Avail and/or Special
A/1

The job aids (continued)

IF you need to...	THEN see...
change • lesson plans • training design, or • testing	A Job Aid for Recommending Training Program Modifications.

NOTICE
This manual has been developed using the standards of the Information Mapping® writing service. Information Mapping is a registered trademark of Information Mapping, Inc. of Lexington, Massachusetts.



Information Mapping, Inc.
First in Information Organization

June, 1983

Project No. 162

GUIDELINES FOR A TRAINING PROGRAM EVALUATION

Prepared for:

U.S. Army
Training Developments Institute

by:

Information Mapping, Inc.

NOTICE
This manual has been developed using the standards of the Information Mapping® writing service. Information Mapping is a registered trademark of Information Mapping, Inc. of Lexington, Massachusetts.

1050 Waltham Street, Lexington, MA 02173 (617) 861-1730

"Edited 12 Dec 83"

This manual was originally researched and written by Donald M. Kristiansen and Bobby G. Witmer for the U.S. Army Research Institute for Behavioral and Social Sciences, Fort Knox Field Unit, Steel Hall, Fort Knox, KY, 40121.

GUIDELINES FOR A TRAINING PROGRAM EVALUATION — TABLE OF CONTENTS

GUIDELINES FOR A TRAINING PROGRAM EVALUATION

- Introduction..... iv

SECTION ONE: GENERAL INFORMATION

- Overview..... 1-1
- The Training Program Evaluation..... 1-2

SECTION TWO: PLANNING THE EVALUATION

- Overview..... 2-1
- General Outline for a TPE..... 2-3
- The Evaluation Schedule..... 2-4
- Selecting Training Program Tasks for Evaluation..... 2-5
- Access to Training Materials..... 2-6
- Background Information..... 2-8
- Gathering Background Information..... 2-9
- Background Information Checklist..... 2-13

SECTION THREE: TRAINING OBSERVATION WORKSHEETS

- Overview..... 3-1
- Worksheet 1, Lesson Plan..... 3-2
- How to Fill Out Part 1, Equipment and Materials..... 3-3
- Sample: Worksheet 1, Lesson Plan--Part 1, Equipment and Materials..... 3-8
- How to Fill Out Part 2, Training Objectives..... 3-9
- Sample: Worksheet 1, Lesson Plan--Part 2, Training Objectives.. 3-13
- How to Fill Out Part 3, Training Events..... 3-14
- Sample: Worksheet 1, Lesson Plan--Part 3, Training Events..... 3-19
- Worksheets 2, 3, and 4..... 3-20

Continued on following page

SECTION FOUR: TRAINING THE OBSERVERS

- Overview..... 4-1
- Workshop Outline..... 4-2
- Workshop Day 1..... 4-5
- Workshop Day 2..... 4-7
- Workshop Day 3..... 4-8

SECTION FIVE: COLLECTING DATA DURING PRACTICE EVENTS

- Overview..... 5-1
- Background Information for Data Collecting..... 5-2
- Observations of Data..... 5-4
- Conclusions Drawn From Data..... 5-6
- Summary of the Data Collecting Process Example..... 5-9

SECTION SIX: ANALYZING TEST SCORE DATA

- Overview..... 6-1
- Analyzing Test Score Data: Obtaining Scoresheets..... 6-2
- Checking No Go Rates on the First Test..... 6-4
- Example of a Test Scoresheet--First Test..... 6-5
- Checking No Go Rates on the First Retest..... 6-6
- Example of a Test Scoresheet--First Retest..... 6-7

Continued on following page

SECTION SEVEN: THE ANALYSIS

- Overview..... 7-1
- Training Objective..... 7-3
- The Lesson Plan..... 7-5
- The Training Site..... 7-8
- Lecture Events..... 7-9
- Demonstration Events..... 7-12
- Practice Events..... 7-15
- Testing Events..... 7-19

SECTION EIGHT: TPE REPORT

- Overview..... 8-1
- TPE Report..... 8-2
- The Final Report..... 8-4

SECTION NINE: DEVELOPING QUESTIONNAIRES FOR SOLDIERS AND INSTRUCTORS

- Overview..... 9-1
- Questioning Soldiers About Formal Instruction..... 9-3
- Questioning Soldiers About Proficiency and Events Outside Formal Training..... 9-4
- Questioning Instructors About Instruction..... 9-6

APPENDIX A

- Practice Event Data..... A-1

NOTICE

This manual has been developed using the standards of the Information Mapping® writing service. Information Mapping is a registered trademark of Information Mapping, Inc. of Lexington, Massachusetts.

GUIDELINES FOR A TRAINING PROGRAM EVALUATION

INTRODUCTION

The Training Program Evaluation (TPE)

The Training Program Evaluation (TPE) is used by a Training Analyst to evaluate, and whenever necessary, improve training programs.

It takes a balanced approach that includes the following:

- evaluating the overall training design
- analyzing the lesson plan
- observing the actual training and testing
- examining the test performance results
- recommending changes to the training developer.

Purpose of this job aid

This job aid provides the Training Analyst with guidelines and procedures for the following areas of the evaluation:

- planning a training program evaluation
- training observers for a TPE
- preparing and using training observation worksheets
- analyzing test score information
- completing the TPE report.

How this job aid is written

This job aid has been written under the assumption that the Training Analyst has not been formally trained to evaluate training programs.

This job aid will provide detailed guidance in planning and conducting a training program evaluation.

What this evaluation will do

The evaluation should answer most of the questions a Training Manager might have when soldiers fail to meet the training objectives.

The evaluation should help the analyst pinpoint the deficiencies in the training program.

What this evaluation will not do

The training program evaluation will not answer questions about the content. For example,

- Are we teaching the right things to the right standards under the right conditions?, or
- Do the skills and knowledges learned in this training help the soldiers do their job?

Content is the responsibility of the Subject Matter Expert. The way the content is delivered in a training program is the concern of the Training Analyst.

Continued on next page

This job aid

This job aid contains the following sections.

SECTION	PAGE
One: General Information	1-1
Two: Planning the Evaluation	2-1
Three: Training Observation Worksheets	3-1
Four: Training the Observers	4-1
Five: Collecting Data During Practice Events	5-1
Six: Analyzing Test Score Data	6-1
Seven: The Analysis	7-1
Eight: The TPE Report	8-1
Nine: Developing Questionnaires for Soldiers and Instructors	9-1
Appendix A: Practice Event Data	10-1

SECTION ONE
GENERAL INFORMATION

OVERVIEW

Introduction

There are several general areas to look at before beginning a Training Program Evaluation.

In this section

This section of the job aid covers the following general introduction to a Training Program Evaluation.

SECTION ONE: GENERAL INFORMATION	PAGE
The Training Program Evaluation	1-2

THE TRAINING PROGRAM EVALUATION

Evaluations begin with questions

There are four general areas that are examined during a training program evaluation:

- **Goals**
- **Design**
- **Process**
- **Product.**

Before beginning an evaluation, certain questions need to be answered in each of these general areas. These questions will help the analyst draw a number of preliminary conclusions about the training.

Question 1: Training goals

When there is a problem with the training, you need to first examine the goals of the training program.

1. **Are the goals of the training program clearly stated?**

Answer to question 1

It would be impossible to evaluate training without clearly stated goals. If you do not know what soldiers are supposed to learn before you begin, then you cannot know if they have been sucessfully trained when the program is completed.

A clearly stated goal should contain the following three parts:

- the tasks or what the soldier is expected to learn and/or do
- the conditions under which the task must be performed
- the standards against which the task must be measured and judged as a GO or NO GO performance.

Note: Training goals are usually found in the lesson plan as part of the training objectives.

For additional information

For additional information on evaluating goals, see A Job Aid For Evaluating Lesson Plans.

Question 2: Training design

The next question that should be asked relates to the design of the training program.

2. **Is it likely that the training progam, as it is designed and written in the lesson plan, will meet its goals?**

Continued on next page

Answer to question 2	For a training program to succeed, the written design must include a detailed step-by-step approach that lists the following points: • what subtasks and tasks will be learned and/or performed and under what conditions • what equipment (type, number, etc.) will be needed • how and when job aids, handouts and/or lectures will be used • how practice time and conditions will be handled for tasks and subtasks • how many instructors and assistant instructors will be involved • what testing procedures will be employed • what standards must be met for a GO or a NO GO. You should be able to judge, just by reading the lesson plan, whether or not the training program will be likely to succeed. Problems with the training can often be traced back to bad design that is incomplete or unclear. Corrections here might provide the solution. If there is nothing obviously wrong with the design, then the problem is with the way the training was carried out.
For additional information	For additional information on evaluating the design, see A Job Aid For Evaluating Lesson Plans.

Continued on next page

Question 3: Training process

The next question relates to the important issue of how well the training design is carried out.

3. Are effective training procedures being used to conduct the training program according to the original design?

Answer to question 3

If the design is planned correctly, then you need to make sure the design is being followed during the training.

The observation phase of the Training Program Evaluation will help you find out in detail what actually happened in the classroom and the field. The observation phase will follow the training from the set-up of the training session to the judging of the soldiers' performance.

You can then use the information to judge if the design was followed step-by-step and if the training was done with the correct training procedures.

For additional information

For additional information on the observation phase, see A Job Aid For the Observation of Training.

Question 4: Training product

The last question you should ask looks at the effectiveness of the training program.

4. Did the training program reach it goals?

Answer to question 4

The question can be simply answered by looking at the performance of the soldiers. An acceptable percentage of soldiers must receive a GO on the first test of a subtask and/or task.

For example, if an acceptable percentage is set at sixty percent and sixty percent of the soldiers receive a GO on the first test, then the training is successful and has reached its goals.

So, if an unacceptable percentage of soldiers receive a NO GO on the first test, then there is a problem with the way the subtask or task is being taught.

Remember: The training developer sets the acceptable percentage of GO's for training.

For information

For additional information on evaluating the training, see Section 6 of this job aid.

SECTION TWO
PLANNING THE EVALUATION

OVERVIEW

Introduction	A Training Analyst begins preparation for a Training Program Evaluation (TPE) by doing the following: • meet with whoever has requested the TPE • find out what tasks need to be evaluated • prepare a schedule of events for the evaluation.
Set up meetings	The Training Analyst should first set up a meeting or series of meetings with the following: • the agency or supervisor who requested the TPE • a representative of the training development agency, and • the department actually giving the training to the soldiers.
Access to training	The Training Analyst should use the meeting(s) to obtain access to the following items: • the training objectives • the lesson plan • the soldier handouts for training • a listing of training and testing events • the completed score sheets • any changes that have been made to the training program, and • any related background materials that might be useful.
Background	The Training Analyst should also use the meetings to get background material on the training program to be evaluated.
Remember: instructors are not evaluated	The Training Analyst should emphasize at all meetings that the TPE is not a system for evaluating instructors. This is important. The analyst should spend some time on this point since instructors have been taught by past practices that training evaluations spell trouble for them.
Changing negative images	The analyst and observers will have to work to change their negative image. Special steps must be taken to assure the instructors that you will be working directly with them, and not their supervisors, to obtain the best training program possible.

Continued on next page

Personnel needs

The analyst at the meeting(s) will probably be asked to do the evaluation with insufficient personnel. The analyst must explain that there is a need for enough trained observers in order to effectively gather data during the training process.

The analyst must also stress that not everyone makes a good observer. The TPE may start out with more personnel than needed before coming up with the best team after the observer's workshops.

TPE time requirements

The analyst will also need to explain to the evaluation user the time required to do a good Training Program Evaluation.

In this section

This section explains how to plan for a Training Program Evaluation.

SECTION TWO: PLANNING THE EVALUATION	PAGE
General Outline for a TPE	2-3
Evaluation Schedule	2-4
Selecting Training Program Tasks for Evaluation	2-5
Access to Training Materials	2-6
Background Information	2-8
Gathering Background Information	2-9
Background Information Checklist	2-13

GENERAL OUTLINE FOR A TPE

Tasks for an evaluation

The following outline describes the general sequence of tasks that need to be done in order to conduct an evaluation. Each task will be described in greater detail in this job aid.

STEP	TASK	ACTION
1	Plan the TPE and the evaluation schedule.	• Gather background information on the TPE. • Get information on the training program.
2	Describe and evaluate the training program.	• Complete the Lesson Plan - Worksheet 1 for each block or module of instruction. • Evaluate the training design as described in a Job Aid for the Evaluation of the Lesson Plan.
3	Observe the training program.	• Train observers (if necessary). • Construct Training Observation Worksheets 2, 3 and 4. • Observe Training events. • Observe Testing.
4	Check for soldier performance deficiencies.	Analyze the test results.
5	Outline probable causes for performance deficiencies.	Analyze <u>all</u> evidence.
6	Report results of TPE and make recommendations.	• Report TPE results. • Make program recommendations.

EVALUATION SCHEDULE

What the analyst does first

The Training Analyst should outline the list of tasks that must be done in order to complete a Training Program Evaluation (TPE). This list should be as detailed as possible and updated regularly. This list will help the analyst put together a TPE schedule.

Other schedule information

The analyst should also make a list of the following items in order to make up an accurate schedule:

- what meetings will be required
- what resources and items will be needed
- when workshops will be scheduled to train observers
- which training modules or tasks will require observation
- which tests will be given that must be observed
- how many briefings have been given or will be given, and
- what reports will be required.

Developing a schedule

The analyst should figure out the schedule for a TPE by

- estimating when each task will occur
- estimating how much time each task will take
- listing what resources will be used to complete each task, and
- listing who will do what on each task.

SELECTING TRAINING PROGRAM TASKS FOR EVALUATION

Selecting tasks for evaluation	The Training Program Evaluation (TPE) user will tell the analyst whether all tasks, or a sample of the tasks are to be evaluated.
Evaluation: all tasks	If the user wants all the tasks evaluated, make sure the user is willing to commit the necessary personnel to cover a complete evaluation.
Evaluation: a sample of the tasks	If the user wants a sample of tasks evaluated, the user should select the tasks to be evaluated. The analyst should also make it clear that evaluation information only on the selected tasks will be provided. If a task is not selected for evaluation, the analyst cannot provide information on the effectiveness of that task.

ACCESS TO TRAINING MATERIALS

Introduction	The Training Analyst should be given access to the following items in order to conduct a useful Training Program Evaluation (TPE): • the training objectives • the lesson plans • the soldier handouts • training and testing events • the soldiers and instructors completed score sheets, and • training program changes.
Remember	The analyst should get these items by setting up a meeting or series of meetings with the agency or supervisor who requested the TPE. The analyst should outline what is needed at this meeting.
Training objectives	The analyst should have a list of all training objectives to be met in a training program. This information includes the training conditions and standards for each task and subtask to be evaluated.
Lesson plans	The analyst should obtain all the lesson plans for the training program including a copy of each of the practical exercises and tests.
Soldier handouts	The analyst should obtain copies of all the soldier handouts for the training program.

Continued on next page

Training and testing	The analyst should obtain access to all training and testing events so that training observers can watch how the events are conducted. An observer should be able to get close enough to the training in order to see and hear everything. Note: Only established safety considerations should prevent an analyst from having proper access to the training.
Access to soldiers and instructors	The analyst should obtain access to all the soldiers and instructors for observers who need to collect information on reactions to a training program. The observer will primarily observe soldiers in training by filling out four types of worksheets. However, it may be necessary to speak with the soldiers and instructors to collect all the necessary information or clarify some part of the training. Note: The observer should be able to collect the information without representatives of the respective chain of command being present.
Score sheets	The analyst should obtain copies of all completed score sheets produced during any practical exercise or test. This includes the results of any exercise during collective training (squad, crew, section or platoon).
Training program changes	The analyst should have complete information on all training program changes that are made during the evaluation, including revisions to the following: • lesson plans • training materials, or • tests.

BACKGROUND INFORMATION

Remember

The analyst should conduct a meeting or a series of meetings with the following persons prior to the start of a Training Program Evaluation (TPE):

- the agency or supervisor who requested the TPE
- a representative of the training development agency, and
- the department actually giving the training to the soldiers.

Purpose of meeting(s)

The evaluation requires that program changes be made whenever deficiencies are discovered in training.

To help implement the necessary changes, it is recommended that the analyst work with training development representatives and training implementation agencies as a team.

This team can examine evaluation results and decide

- what changes will produce the most benefit
- which changes are feasible, and
- which changes are most likely to be adopted by their agencies.

Information you must gather

The analyst should use the meeting(s) to gather the following information:

- meeting information (getting information on the meeting(s) and the evaluation)
- training program information (providing background information for the evaluation)
- TPE report information (getting information for the final TPE report).

All this information will be used by the analyst in a final report on the TPE.

A checklist

Use the checklist on page 2-13 to help gather all the necessary background information prior to the start of an evaluation.

Continued on next page

GATHERING BACKGROUND INFORMATION

Introduction

The following 3 charts explain the purpose of information to be gathered prior to an evaluation.

The analyst may not be able to obtain all of the information during the one meeting or the analyst may not be able to gather some of the information at all.

You should try to obtain the necessary information in the planning phase of an evaluation.

There is a checklist at the end of this section to help make sure all the necessary information is received.

Purpose of information

The analyst should obtain the information in order to become familiar with the training that will be evaluated.

Note: This is necessary since in some cases training courses have almost identical names and the analyst must be sure he is evaluating the correct course.

Meeting information

This chart lists the purpose for gathering each meeting item of information on the checklist.

ITEM	PURPOSE OF ITEM
MEETING INFORMATION	
Meeting(s) date	To keep an accurate record of the meeting(s).
Meeting participants	To keep a record of all participants at the meeting including • the name of their agency • the agency's connection to the TPE, and • the agency's telephone number.
User	To keep a record of the agency (user) that requested the TPE including • the agency name • a contact name, and • a contact telephone number.
Contacts	To keep a record of the name and telephone numbers of contacts for the instructor group, and the training development agency.

Continued on next page

Meeting information (continued)

ITEM	PURPOSE OF ITEM
Course	To get the correct name of the course to be evaluated.
Purpose of the course	To make sure the purpose of the course is clearly written. Note: You can use this item to check if the events in the course relate to the purpose.
TRAINING PROGRAM INFORMATION	
Primary audience	To find out the audience for the course. This should be clearly stated by the training developer. Note: If the training developer is not clear on who the training is designed for, then the training events cannot be designed for a particular audience.
Expected entry skills/ knowledge	To find out what skills and knowledge a soldier must know prior to taking the course. Each course has certain skills and knowledge a soldier must know for performance in a course. These skills and knowledge will not be taught during the course since the soldiers should already know them.
Training schedule	To have a copy of the training schedule for a course. The analyst should get a copy of the schedule as well as all additional schedules and schedule changes.
Soldier selection standards	To have a copy of the standards used in selecting soldiers to take the course.

Continued on next page

Meeting information (continued)

ITEM	PURPOSE OF ITEM
Entry test	To find out if the expected knowledge and skills will be assumed or tested. Important: If there is an entry test, then get a copy of the test, and arrange to have an observer at the test.
Instructor selection standards	To find out on what basis instructors will be selected for a course and if instructor training is required. Note: Many training problems can be traced to instructors not properly trained.
Resource materials	To make a list of the following: • what documents you will need for a course • who you will get the documents from • when you can get the documents • when you actually got the document(s), and • what changes were made to the documents. Note: Expect many changes on these materials.
SUGGESTED TPE REPORT INFORMATION	
TPE constraints	To list all constraints that will limit your activities during a TPE.
Report completion date	To write down when the final TPE report is due.
Contingencies	To list any events or constraints that will affect meeting your completion date. Note: Especially note any lack of resources.

Continued on next page

Meeting information (continued)

ITEM	*PURPOSE OF ITEM*
Previous evaluations	• To find out if there have been any previous evaluations to all <u>or</u> part of this course. • To get copies of the previous evaluations. • To check and see if any problems were identified and solutions offered. • To check and see if the problems still exist <u>or</u> if the solutions eliminated the problems.
Comparative study	To find out if the soldier's performance in this course is to be compared to the soldier's performance in some other course <u>or</u> an earlier version of this course. <u>Note</u>: If you expect to compare two or more training methods, get help from someone trained to conduct educational research. This type of comparison is usually beyond the scope of the TPE system.

BACKGROUND INFORMATION CHECKLIST

The checklist

Use the following checklist to help plan and set-up a Training Program Evaluation.

CHECK	ITEM
	MEETING INFORMATION
	Meeting date
	Meeting participants
	TPE user
	Contacts
	Course
	Purpose of the course
	TRAINING PROGRAM INFORMATION
	Primary audience
	Expected entry skills/knowledge
	Training schedule
	Soldier selection standards
	Entry test
	Instructor selection standards
	Resource materials
	TPE REPORT INFORMATION
	TPE constraints
	Report completion date
	Contingencies
	Previous evaluations
	Comparative study

Next section

In the next section, you will complete or construct the Training Observation Worksheets which are used to observe a training program.

SECTION THREE
TRAINING OBSERVATION WORKSHEETS

OVERVIEW

Introduction

The Training Analyst must fill out Training Observation Worksheet 1, and organize the Questions and information for Worksheets 2, 3 and 4.

For additional information, see A Job Aid for Observing Training.

The worksheets

The analyst uses the following four Training Observation Worksheets to analyze a training program.

- Worksheet 1, Lesson Plan
- Worksheet 2, Training Environment
- Worksheet 3, Training Observation
- Worksheet 4, Testing Observation

In this section

In this section, the Training Analyst will find instructions for filling out the three parts of Worksheet 1, Lesson Plan and organizing and developing the remaining three worksheets.

SECTION THREE: TRAINING OBSERVATION WORKSHEETS	PAGE
Worksheet 1, Lesson Plan	3-2
How to Fill Out Part 1, Equipment and Materials	3-3
Sample: Worksheet 1, Lesson Plan--Part 1, Equipment and Materials	3-8
How to Fill Out Part 2, Training Objectives	3-9
Sample: Worksheet 1, Lesson Plan--Part 2, Training Objectives	3-13
How to Fill Out Part 3, Training Events	3-14
Sample: Worksheet 1, Lesson Plan--Part 3, Training Events	3-19
Worksheets 2, 3 and 4	3-20

WORKSHEET 1, LESSON PLAN

Purpose	Worksheet 1 has several useful functions. The analyst can use the worksheet to evaluate the training design. Filling out the worksheet also allows the analyst to outline the training plan prior to observation. This outline can enable the observer to easily see if the lesson plan is being followed by the instructor.
Description of Worksheet 1	Worksheet 1, Lesson Plan has three parts: • Part 1, Equipment and Materials • Part 2, Training Objectives • Part 3, Training Events.

HOW TO FILL OUT PART 1, EQUIPMENT AND MATERIALS

Description

Part 1 of Worksheet 1, Lesson Plan lists the training equipment and materials that will be used.

There are six specific areas that are covered:

- training equipment
- training materials
- training aids
- job aids
- training site
- safety precautions.

Materials needed

The analyst should complete Part 1 with information from the following:

- lesson plans
- training outlines, and
- other training materials.

Sample

Use the blank sample on the following page to help you complete Part 1 of Worksheet 1, Lesson Plan.

Continued on next page

HOW TO FILL OUT PART 1, EQUIPMENT AND MATERIALS, Continued

Sample form

WORKSHEET 1, LESSON PLAN - PART 1, EQUIPMENT AND MATERIALS

Class/Lesson Title ①

Training Observer ②

1. List under the appropriate heading below the training aids, equipment, and materials that will be used during this lesson.

Training Equipment	Training Materials	Training Aids
③	④	⑤

2. List any job aids that will be provided to soldiers and used during this training.

⑥

3. From the lesson plan, briefly describe the characteristics required of the training site. Include how the site should be prepared for training.

⑦

4. List safety precautions that should be emphasized and followed during this training.

⑧

Continued on next page

How to complete Part 1

Use the following procedure to complete Part 1.

ITEM	PROCEDURE
1	Write the name of the block of instructions to be observed and evaluated for the TPE. Example: If the block of instructions to be observed and evaluated is "Operator Maintenance on Cal. 50 M2 HB Machinegun" then write it as follows: WORKSHEET 1, LESSON PLAN - PART 1, EQUIPMENT AND MATERIALS Class/Lesson Title Operator Maintenance on Cal .50 M2 HB Machinegun
2	Leave this line blank. This is filled in by the Training Observer of the class/lesson.
3	List all the training equipment to be used. Example: If the lesson plan lists the training equipment as: one .50 Cal. Machinegun per student, a headspace and timing gauge and a five round belt of dummy ammunition, then write it as follows: Training Equipment One .50 Cal Machinegun per student Headspace & Timing Gauge Five-round belt of dummy ammunition
4	List all the training materials to be used. Example: If the lesson plan lists the training material as: TM 9-1005-213-10 and Handout--"Machinegun M2, Cal .50 HB", then write it as follows: Training Materials TM 9-1005-213-10 Handout, "Machinegun M2, Cal .50 HB

Continued on next page

How to complete Part 1 (continued)

ITEM	PROCEDURE
5	List <u>all</u> the training aids to be used. <u>Example</u>: If the lesson plan lists charts and chalkboards, then write it as follows: **Training Aids** Charts Chalkboard
6	List <u>all</u> the job aids the soldier needs to have in order to know when and how to perform a task. <u>Example</u>: If the lesson plan specifies no job aids, then write <u>none</u>. 2. List any job aids that will be provided to soldiers and used during this training. None.
7	Write down any requirements that the training site has prior to the start of training. <u>Example</u>: This item should be filled in as follows: 3. From the lesson plan, briefly describe the characteristics required of the training site. Include how the site should be prepared for training. Training site should be a large classroom with tables for assembly/disassembly. Each Cal .50 M2 HB machinegun should be checked by AI before class to ensure it is operational. Machineguns and all associated equipment to include headspace and timing gauge, dummy ammunition and .50 cal link should be present.

Continued on next page

How to complete Part 1 (continued)

ITEM	PROCEDURE
8	List all the safety precautions that must be followed during training. Example: This item should be filled in as follows: 4. List safety precautions that should be emphasized and followed during this training. (a) Ensure weapon is clear before starting disassembly. (b) Before removing backplate, ensure that recoiling parts are forward to prevent injury. (c) If headspace is set improperly or timing is early, the round may fire before fully seating in the chamber causing damage to parts or injury to personnel.

Completed form

For an example of a completed Worksheet 1, Lesson Plan--Part 1, Equipment and Materials, see the following page.

Continued on next page

SAMPLE: WORKSHEET 1, LESSON PLAN—PART 1, EQUIPMENT AND MATERIALS

Sample form — This is an example of Part 1 after all the necessary information has been filled in.

WORKSHEET 1, LESSON PLAN - PART 1, EQUIPMENT AND MATERIALS

Class/Lesson Title Operator Maintenance on Cal .50 M2 HB Machinegun

Training Observer (Observer's Name)

1. List under the appropriate heading below the training aids, equipment, and materials that will be used during this lesson.

Training Equipment	Training Materials	Training Aids
One .50 Cal Machinegun per student	TM 9-1005-213-10	Charts
Headspace & Timing Gauge	Handout, "Machinegun M2, Cal .50 HB	Chalkboard
Five-round belt of dummy ammunition		

2. List any job aids that will be provided to soldiers and used during this training.

   None.

3. From the lesson plan, briefly describe the characteristics required of the training site. Include how the site should be prepared for training.

Training site should be a large classroom with tables for assembly/disassembly. Each Cal .50 M2 HB machinegun should be checked by AI before class to ensure it is operational. Machineguns and all associated equipment to include headspace and timing gauge, dummy ammunition and .50 cal link should be present.

4. List safety precautions that should be emphasized and followed during this training.

   (a) Ensure weapon is clear before starting disassembly.

   (b) Before removing backplate, ensure that recoiling parts are forward to prevent injury.

   (c) If headspace is set improperly or timing is early, the round may fire before fully seating in the chamber causing damage to parts or injury to personnel.

HOW TO FILL OUT PART 2, TRAINING OBJECTIVES

Description

Part 2 of Worksheet 1, Lesson Plan lists the training objectives for the lesson by task and subtask.

Each training objective listed in Part 2 will contain

- a task
- a condition or conditions and
- the standards for a GO.

Training objective terms and meanings

TERM	WHAT IT MEANS
task	A description of what a soldier is supposed to be able to do after training.
a condition or conditions	The conditions are • the things a soldier will be given to perform the task, and • the circumstances under which the soldier will perform the task. (Example: darkness; weather conditions, etc.)
the standards for GO	The standards tell how quickly and accurately the soldier must perform the task in order to receive a GO.

Materials needed

The analyst should complete Part 2 with information from the following:

- lesson plans
- training outlines, and
- other training materials.

Sample

Use the blank sample on the following page to help you complete Part 2 of Worksheet 1, Lesson Plan.

Continued on next page

HOW TO FILL OUT PART 2, TRAINING OBJECTIVES, Continued

Sample form

WORKSHEET 1, LESSON PLAN - PART 2, TRAINING OBJECTIVES

Class/Lesson Title ①

TRAINING OBJECTIVES		
Task No.	Objective	Source
②	③	④

Continued on next page

HOW TO FILL OUT PART 2, TRAINING OBJECTIVES, Continued

How to complete Part 2

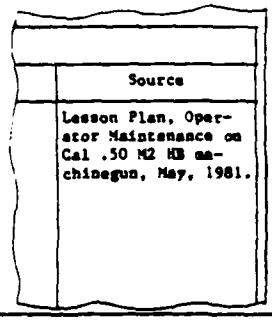
Use the following procedure to complete Part 2.

ITEM	PROCEDURE
1	Write the name of the block of instructions to be observed and evaluated for the TPE. (from Part 1) Example: WORKSHEET 1, LESSON PLAN - PART 2, TRAINING OBJECTIVES Class/Lesson Title Operator Maintenance on Cal .50 M2 HB Machinegun
2	Write an official task number or use this column to write your own number sequence for tasks and sub-tasks. Example: Task No. 1 1A
3	• List the training objectives from the lesson plan using enough detail so that the observers will understand. Example: TRAINING OBJECTIVES Objective Task: Perform operator maintenance on a Cal .50 M2 HB machinegun. • Use whatever abbreviations all the observers will be familiar with. Example: Analysts might use these abbreviations: • T for task • C for conditions • S for standards • AI for assistant instructors.

Continued on next page

HOW TO FILL OUT PART 2, TRAINING OBJECTIVES, Continued

How to complete Part 2 (continued)

ITEM	PROCEDURE
4	Identify here the source of your training objective entry. This may be any of the following: • lesson plan number and date • training plan and date • training outline, or • FM/TM/TC. Note: This entry is used to find out where the information came from if training program changes are made. Example: 

Completed form

For an example of a completed Worksheet 1, Lesson Plan--Part 2, Training Objectives, see the following page.

SAMPLE: WORKSHEET 1, LESSON PLAN--PART 2, TRAINING OBJECTIVES

Sample form

WORKSHEET 1, LESSON PLAN - PART 2, TRAINING OBJECTIVES

Class/Lesson Title Operator Maintenance on Cal .50 M2 HB Machinegun

TRAINING OBJECTIVES		
Task No.	Objective	Source
1	Task: Perform operator maintenance on a Cal .50 M2 HB machinegun.	Lesson Plan, Operator Maintenance on Cal .50 M2 HB machinegun, May, 1981.
1A	Subtask: Clear the weapon in sequence following procedures on page 3 of the handout.	
1B	Subtask: Disassemble the Cal .50 M2 HB machinegun.	
1C	Subtask: Assemble the Cal .50 M2 HB machinegun and perform operational check.	
	Conditions: Provided with a Cal .50 M2 HB machinegun in a classroom with a table for assembly/disassembly.	
	Standards:	
	(1) Subtask 1A is performed correctly within 10 seconds.	
	(2) Subtask 1B is completed within 4 minutes.	
	(3) Subtask 1C is performed within 6 minutes.	
2	Task: Set and check headspace and timing on a Cal .50 M2 HB machinegun to ensure proper firing.	Same as above.
	Conditions: Provided with a Cal .50 M2 HB machinegun, headspace and timing gauge, and a Cal .50 ammunition link in a classroom.	
	Standards:	
	(1) Check and/or set headspace and timing on the Cal .50 M2 machinegun IAW procedures on page 37, paragraph 2, of TM 9-1005-213-10.	
	(2) Task must be completed within 5 minutes.	

HOW TO FILL OUT PART 3, TRAINING EVENTS

Description

Part 3 of Worksheet 1, Lesson Plan lists and describes the 5 types of training events that will occur.

Definition

A training event is any activity that the instructor either does or asks the soldier(s) to do.

Types of training events

There are five types of training events:

- stating the objectives or purpose of the event (OBJ)
- listing new terminology and concepts (TERM)
- demonstrating the task or subtask (DEMO)
- practicing the task or subtask (PRAC)
- testing the skills and knowledge learned (TEST).

Description of event types

The analyst needs to list what the instructor will do during the training.

EVENT TYPE	DESCRIPTION
OBJ	Objectives/Purpose: The analyst should list each training objective including the tasks, conditions and standards.
TERM	Terminology: The analyst should list new terms and unfamiliar concepts to be introduced to the soldiers.
DEMO	Demonstration: The analyst should list what task or subtask should be performed for the soldiers. The analyst should include any special instructions for the instructor.
PRAC	Practice: The analyst should list what the soldiers must practice and list any special instructions for the instructor or assistant instructor. Note: If the lesson plan contains an annex listing the events that the assistant instructor must have each soldier complete, then attach the annex to the Worksheet.
TEST	The analyst should list what tasks and subtasks must be tested.

Note: The lesson plans should describe each activity in enough detail for the analyst to make a comprehensive list.

Continued on next page

Remember	The analyst may notice problems with a lesson plan when filling out Part 3. If there are problems with the lesson plan, then the analyst should make recommendations to the training developer for changes. The analyst should also alert the observers that there will probably be problems in those areas during the training.
Materials needed	The analyst should complete Part 3 with information from the following: • lesson plans • training outlines, and • other training materials.
Sample	Use the blank sample on the following page to help you complete Part 3 of Worksheet 1, Lesson Plan.

Continued on next page

Sample form

WORKSHEET 1, LESSON PLAN - PART 3, TRAINING EVENTS

Class/Lesson Title ①

TRAINING EVENTS					
Task No.	Event Type	Events	Occur? Yes	Occur? No	Comments
②	③	④	⑤	⑤	⑥

Continued on next page

How to complete Part 3

ITEM	PROCEDURE
1	Write the name of the block of instructions to be observed and evaluated for the TPE. Example: WORKSHEET 1, LESSON PLAN - PART 3, TRAINING EVENTS Class/Lesson Title Operator Maintenance on Cal .50 M2 HB Machinegun
2	Write the task number in this column. Remember: Use the same task numbers for Part 2 and 3 of Worksheet 1.
3	Write the event types in this column. Example: Event Type OBJ TERM
4	• Describe each event in this column. • Use enough detail so the observer can identify the event when it happens or when it does not happen. Example: Events Instructor states training objective (see Part 2).

Continued on next page

How to complete Part 3 (continued)

ITEM	PROCEDURE
5	Leave this column blank. Note: The observer will mark this **YES** or **NO** to record whether an event occurred or did not occur.
6	Leave this column blank. Note: The observer will use this column to note changes in planned events.

Completed form

For an example of a completed Worksheet 1, Lesson Plan--Part 3, Training Events see the following page.

SAMPLE: WORKSHEET 1, LESSON PLAN—PART 3, TRAINING EVENTS

Sample form

WORKSHEET 1, LESSON PLAN - PART 3, TRAINING EVENTS

Class/Lesson Title Operator Maintenance on Cal .50 M2 HB Machinegun

TRAINING EVENTS					
Task No.	Event Type	Events	Occur? Yes	Occur? No	Comments
1	OBJ	Instructor states training objective (see Part 2).			
1	TERM	Instructor shows .50 cal to the soldiers and labels each part listed below. 1. Butterfly Trigger Safety 2. Barrel 3. Cover Group 4. Charger Handle 5. Barrel Locking Spring Lug 6. Receiver 7. Barrel Extension Group 8. Extension Spring 9. Backplate Assembly 10. Driving Spring Rod Assembly 11. Bolt 12. Bolt Stud 13. Barrel Buffer Body Group 14. Barrel Buffer Assembly 15. Retaining Pin			
1	TERM	Instructor identifies the following: 1. Ammunition Belt 2. Extractor 3. Ammunition Box			
1A	DEMO	Clear the cal .50 machinegun.			
1A	PRAC	Clear the cal .50 machinegun.			
1B	DEMO	Disassemble the cal .50 machinegun.			
1B	PRAC	Disassemble cal .50.			

WORKSHEETS 2, 3 AND 4

What the analyst does

The Training Analyst must also develop the following three Worksheets.

These worksheets are:

- Worksheet 2, Training Environment
- Worksheet 3, Training Observation
- Worksheet 4, Training Observation.

The analyst will decide the format and the questions to be used for the worksheets.

Remember: The analyst must decide what to cover in order for the worksheets to provide enough information for an analysis of a training program.

Deciding the worksheet format

The first thing an analyst should do is decide what format to use for the three worksheets.

Examples of formats for these worksheets can be found in Section 2 of a Job Aid for Observing Training.

Modifying the sample format

An analyst can modify the format to use with the TPE, but it is recommended that the analyst retain the requirement that each question be answered with a **YES** or **NO** response.

Note: The analyst should not change the format so that the observers are required to submit personal judgments or rate the training they observe. Personal judgments will not always provide objective data collection.

Continued on next page

How to construct the worksheets

The analyst then develops the three worksheets by choosing from the 109 questions explained in detail in A Job Aid for Observing Training.

In choosing the questions, the analyst should consider the following:

- the difficulty of each question
- the capability of the training observers
- the depth of evaluation required, and
- the type of coverage of the major training events needed.

Explanation of the questions

Use the table below to find the explanation of questions for each worksheet.

Worksheet questions	See Part 3, A Job Aid for Observing Training
Worksheet 2--Training Environment	Section A
Worksheet 3--Training Observation	Section B
Worksheet 4--Testing Observation	Section C

Choosing questions

The analyst must choose between questions that are easy to answer and questions that may be difficult to answer and require careful observation. Remember that the degree of difficulty may vary by observer.

Choosing difficult questions

The analyst should decide whether to use difficult evaluation questions based on the skills and capabilities of the observers.

The depth of the evaluation

The analyst should also talk with the TPE user to find out how much in-depth evaluation and analysis of the training program is needed. Based on this decision, the analyst can further define the choice and level of the questions.

Continued on next page

Training coverage	The questions should generally provide the most adequate coverage of the training program. Good coverage of a training program will require questions from each worksheet section. Note: If a training program is not adequately covered by questions, then the usefulness of the evaluation will be reduced.
Important	The analyst should pilot test the worksheets to make sure that the observers can use them to produce the type of information that is needed. Note: The analyst may find it necessary to add or delete questions based on the pilot test.
Next section	In the next section, a description of what an analyst must do to train observers will be given.

SECTION FOUR
TRAINING THE OBSERVERS

OVERVIEW

Introduction

The Training Analyst should hold a workshop to train observers who will collect data and information for a Training Program Evaluation (TPE).

A training workshop

The analyst will need to conduct a workshop in order to

- train the observers to use the training observation worksheets in order that the evaluation may be done properly
- find out what each observer is capable of doing
- find out if the right questions were chosen for the training observation worksheets
- teach the observers that the training observation worksheets will be used to organize their comments on a training program
- try out the evaluation system before the analyst and observers use it on the actual training program.

In this section

This section will outline what the analyst must do before and during the observer training workshop.

SECTION FOUR: TRAINING THE OBSERVERS	PAGE
Workshop Outline	4-2
Workshop Day 1	4-5
Workshop Day 2	4-7
Workshop Day 3	4-8

WORKSHOP OUTLINE

When to schedule the workshop	The workshop should be scheduled for 3 consecutive days. The Training Analyst should never break up the workshop over a weekend. Example: Schedule the workshop for any of the following days: • Monday, Tuesday and Wednesday • Tuesday, Wednesday and Thursday • Wednesday, Thursday and Friday.
Schedule full days	The analyst should schedule the workshop for 3 full days. Note: The workshop may not use all of the scheduled third day but a full day should still be scheduled.
Daily schedule	The analyst should schedule the workshop using the outline for each day on pages 4-3 and 4-4.
What must be done prior to the workshop	The analyst should do the following 4 things prior to a workshop: • arrange to conduct the workshop with no more than 5 observers • arrange to observe a long (at least 3-hours) training session from the program to be evaluated at least a week in advance and get the program's lesson plan for the workshop • provide a completed Worksheet 1, Lesson Plan, and A Job Aid for Observing Training to the observer candidates at least 24 hours in advance of the workshop • arrange to train the observers on Days 1 and 3 at the same site.
Limit to five observers	A workshop larger than six persons (the analyst and five observers) will be a distraction at a training event. The analyst should have only five observers in each workshop in order to closely study the potential of each observer.

Continued on next page

The workshop site

The analyst should arrange to use the same site for Days 1 and 3 of the workshop. The site must have the following:

- adequate lighting
- quiet
- writing surfaces for each observer (tables or desks)
- chalkboards, large tablet and easel, or butcher paper and easel.

Workshop schedule

The analyst should follow this schedule of events when conducting the 3-day workshop for training observers.

DAY	TIME	SCHEDULE
1	Morning	Provide an introduction to the Training Program Evaluation (TPE) by explaining • the objectives of the TPE • the purpose of the TPE • the schedule for the TPE, and • background information on the TPE. Note: The analyst should use the information on page 1-2 as a guide to explaining TPE background.
1	Afternoon	Provide an explanation of the terminology found on the following so the observers understand what the questions mean. • Worksheet 2, Training Environment • Worksheet 3, Training Observation • Worksheet 4, Testing Observation Provide a demonstration event for these worksheets so that observers understand what they need to see and know to record their observations. (See page 2-1 in A Job Aid for the Observation of Training) Note: If a live demonstration is not possible, the analyst should use a filmed or video taped piece of instruction.

Continued on next page

WORKSHOP OUTLINE, Continued

Workshop schedule (continued)

DAY	TIME	WHAT SHOULD BE SCHEDULED
2	Morning and Afternoon	Prepare to observe a session of a training program. Observe a training lesson, which is at least 3 hours long and includes the following: ● a lecture ● a demonstration ● a practice event, and ● a test.
3	Morning	Allow the observers to organize their data from Day 2.
3	Afternoon	● Lead the group through a discussion of their observations and data from Day 2. ● Summarize the workshop.

For more details

A more detailed explanation of what should be taught on each of the three days of the workshop are on the following pages.

DAY	PAGE
1	4-5
2	4-7
3	4-8

WORKSHOP DAY 1

Workshop procedure: Day 1

The analyst should use the following procedures to train observers on Day 1 of the workshop.

STEP	ACTION

1	Provide the observers with the following training objective for the workshop.
	
	• The task is to observe ongoing training and testing in order to answer the questions on training observation Worksheets 2, 3 and 4 and to determine if the lesson plan (Worksheet 1) has been followed.
	
	• The conditions include giving the observers the following in order to make observations at any assigned training site:
	
	  • a completed Worksheet 1, Lesson PLan
	  • blank worksheets
	
	  • Worksheet 2, Training Environment
	  • Worksheet 3, Training Observation
	  • Worksheet 4, Testing Observation
	
	  • a stopwatch.
	
	• The standards include answering all questions on the worksheets, making necessary written comments, indicating **YES** or **NO** responses to questions, and labeling all opinions on training.
	
	Note: Opinions will include all personal judgments made by the observers.

2	Provide the observers with the purpose of the workshop. Example: One of the purposes for the workshop includes training the observers to use the job aid and worksheets.
3	Tell the observers what their job duties will be so they can relate the training to their actual work. Note: The observers must know that the workshop is a practice session.

Continued on next page

Workshop procedure: Day 1 (continued)

STEP	ACTION
4	Tell the observers what the consequences will be for learning or not learning to be observers. Note: The analyst should make sure positive consequences are provided since if there are none, the observers are likely to put little effort into the tasks. The analyst should outline consequences for not learning as well.
5	Provide the observers with the workshop schedule.
6	Go through A Job Aid for Observing Training. Go through the questions on the training observation worksheets to make sure the observers know • what to look for in training • how to tell when an event happens or does not happen • how to record their training observations. Note: Make sure all the observers have the same interpretation of this part of the workshop so there is standardization.
7	Get feedback from the observers to see if they understand the job aid and the worksheets. Note: The analyst should provide class breaks during feedback since this part of the workshop is usually long.
8	Give a demonstration of the task either by running a film or television tape. It will not always be possible to give a live demonstration or a filmed televised tape for the observers but it is suggested to try and give some type of demonstration. Comment on the demonstration and relate what is being seen on the worksheets.
9	Finish Day 1. Make sure everyone knows • what will happen on Day 2 • where it will happen • what they need to bring • what time it will happen • what uniform is required.

WORKSHOP DAY 2

Workshop procedure: Day 2

The analyst should use the following procedures to train observers on Day 2 of the workshop.

STEP	ACTION
1	Prepare the observers to view an actual task using the training observation worksheets by • telling the observers <u>not</u> to worry about writing their comments in the correct places on the worksheets • giving the observers blank paper to write on or having them write on the backs of the worksheets, if necessary • warning the observers <u>not</u> to talk with instructors <u>or</u> soldiers at the training site but to go through you (the analyst) if they have any questions. <u>Important</u>: The worksheets can be rewritten later with all answers and comments in the right place.
2	Observe at least 3 to 6 hours of training with the observers to view the strengths and weaknesses of each observer. <u>Important</u>: The analyst should split up the observers if a practice event is scheduled at several training sites. There should be at least one observer at each site.
3	Finish Day 2 Make sure everyone knows • what will happen on Day 3 • where it will happen • what they need to bring • what time it will happen • what uniform is required.

WORKSHOP DAY 3

Workshop procedure: Day 3

The analyst should use the following procedures to train observers on Day 3 of the workshop.

STEP	ACTION
1	Have the observers consolidate all the comments written on the worksheets on Day 2.
2	Go over each question on the worksheets and compare comments from the class including your own. Try to bring the group to a consensus so the conclusions on the training will be a team effort. Note: The analyst can learn a lot about team members at this time which will help to manage the team later.
3	Collect the worksheets so you can see what is actually written. Use the worksheets to determine who will be selected as observers, if all candidates are not needed.
4	Provide a question and answer discussion on the workshop.
5	Summarize the workshop. Finish Day 3.
6	Show the assigned training program(s) to the observers who have been selected.

Next section

In the next section, it will be explained how data should be collected during practice events for an evaluation.

SECTION FIVE
COLLECTING DATA DURING PRACTICE EVENTS

OVERVIEW

Introduction

Training observers should be skilled data collectors. It is valuable for them to collect different kinds of data during practice events and to then use this data to draw conclusions about the training.

This section details how a training observer should collect data during practice events. The guidelines and examples presented in this section supplement the material outlined in Section 4: Training the Observers.

Problem with data collection

Observers often have trouble collecting data during practice events, possibly because there seems to be a natural inclination to "watch" what is going on, rather than recording it in detail. The problem with this approach is that when the practice event is over, all the observer has is a general impression of what happened.

Since practice events are the most critical events for training, a Training Program Evaluation (TPE) should collect more than general impressions about how these events were conducted.

In this section

In this section, the following information about data collecton will be presented:

SECTION 5: COLLECTING DATA DURING PRACTICE EVENTS	PAGE
Background Information for Data Collecting	5-1
Observations of Data	5-4
Conclusions Drawn from Data	5-6
Summary of the Data Collecting Process Example	5-9

BACKGROUND INFORMATION FOR DATA COLLECTING

Introduction

The following example, drawn from the armor training program, outlines the data gathering process used for an individual training program. Similar data could also be gathered during collective training.

Background

This table gives background information on the prerequisites and expectations for the practice event. This information should be provided on Worksheet 1, Lesson Plan. The information provided by Worksheet 1 has been reorganized into this table in order to see the four particular areas in which the soldiers must perform.

GOAL	PERFORM THIS TASK	UNDER THESE CONDITIONS	TO THIS STANDARD	WITHIN THIS TIME LIMIT
Objective 1	To engage and score a "hit" on a single stationary target using a ballistic and non-ballistic reticle.	Using a Wiley Burst-On-Target Trainer, given the appropriate fire command.	Score a "hit" on each of two separate engagements with each reticle.	15 seconds (per engagement)
Objective 2	To engage and score a "hit" on a single moving target using a ballistic and non-ballistic reticle.	Using a Wiley Burst-On-Target Trainer, given the appropriate fire command.	Score a "hit" on each of two separate engagements with each reticle.	15 seconds (per engagement)
Objective 3	To sense and adjust fire given a first round miss using a ballistic and non-ballistic reticle.	Using a Wiley Burst-On-Target Trainer adjusted to produce a first round miss, given the appropriate fire commands.	Make the correct sensing and score a second round "hit" on each of two separate engagements with each reticle.	30 seconds (per engagement)

Performance to standard

Each soldier was expected to practice the three objectives until he or she has performed to standard. Performance to standard was required in <u>each</u> of the separate areas outlined above.

<u>Example</u>: For Objective 1 (Goal), the task, condition, standard <u>and</u> time limit must be met to satisfy Objective 1.

Continued on next page

Practice event components

The practice event consisted of the following components:

- four separate stations, each containing a tank gunnery training device (Wiley), and an assistant instructor
- a class size of 6 soldiers per station
- a schedule that called for two 50-minute periods for this practice.

What data the observers collect

Observers collected the following information on each soldier at each station during the practice event:

- Number of engagements
- For each engagement:
  - Engagement type (from observations and instructor comments)
  - Time
  - Hit or miss
  - Instructor comments.

Example

This example shows how the information was recorded by station and by soldier on a blank piece of paper.

STATION 1

SOLDIER	ENGAGEMENT NUMBER/TYPE	TIME (SEC.)	HIT/MISS	INSTRUCTOR COMMENTS
1	1/BM			ABORTED BY INSTRUCTOR: SOLDIER DID NOT KNOW HOW TO USE BALLISTIC RETICLE
	2/BM	52	M	WRONG RANGE, WRONG LEAD
	3/BM	47	M	WRONG RANGE
	4/BM	51	H	
	5/BSA	74	M	WRONG SENSING, WRONG ADJUSTMENT
	6/BSA	65	M	WRONG ADJUSTMENT
	7/BSA	59	H	
2	1/BM	34	M	WRONG RANGE, WRONG LEAD
	2/BM	39	M	WRONG RANGE
	3/BM	42	H	
	4/BM	41	M	WRONG ADJUSTMENT
	5/BSA	46	M	WRONG ADJUSTMENT
	6/BSA	39	H	

Note:
- BM means Ballistic Reticle, Moving Target
- BSA means Ballistic Reticle, Sense and Adjustment.

For further example

For a complete example, see Appendix A.

OBSERVATIONS OF DATA

What the data shows

The background information collected during a training session tells us a lot about the practice event. If the detailed data had not been collected, only general impressions of how the event was conducted would have been possible.

Using the data

The background data collected during the practice event is summarized in the following observations.

Observation One: Engagement types practiced at each station

Engagement Type	Station			
	1	2	3	4
Non-ballistic Stationary		x		
Non-ballistic Moving		x		x
Non-ballistic Sense/Adjust		x		
Ballistic Stationary		x	x	
Ballistic Moving	x	x	x	x
Ballistic Sense/Adjust	x	x	x	x

Soldiers were supposed to have practiced six different engagement types. Practice with the non-ballistic reticle was virtually ignored. Therefore, the practice event did not conform to the lesson plan.

The data recorded in the table shows that only one station (station 2) attempted all required engagement types.

Continued on next page

Observation Two: Lack of uniformity

The conclusion from Observation 1 is that there was no uniformity among the stations. The requirements of the lesson plan were ignored and each station conducted practice in accordance with the priorities of the individual instructor. "What is trained" should not be an individual instructor decision.

Therefore, this practice event

- defeated the purpose of the training lesson plan
- suggests a lack of supervision by training management, and
- suggests what can happen when a lesson plan is impossible to carry out given the time and/or resource constraints.

Observation Three: Soldiers did not meet performance standards

By adding up the numbers, it is obvious that one-fourth of the soldiers had no opportunity to practice the tasks. None of the soldiers practiced until they reached the required performance standards set forth in the lesson plan.

The data recorded for each station shows

- the number of soldiers at the station (there were 6 at each station)
- the number of soldiers who practiced (as recorded on the data sheet)
- the number of soldiers who achieved the training standard indicated by the Worksheet 1, Lesson Plan and the table page.

Number of Soldiers	Station			
	1	2	3	4
Number of soldiers	6	6	6	6
Number of soldiers who practiced	6	3	4	5
Number of soldiers who achieved the training standard in all four areas	0	0	0	0

Problems revealed through observation

These observations conducted during the practice event, revealed several problems. These findings are presented over the following pages.

CONCLUSIONS DRAWN FROM DATA

Recorded data

The data recorded in the table below shows the total results for the 140 engagements conducted during the practice event (for the complete data see Appendix A).

Engagements	Type of Engagement						Totals
	NB Reticle			B Reticle			
	Sta	Mov	S/A	Sta	Mov	S/A	
Engagements	6	15	6	18	57	38	140
Engagements:							
Meeting Time Std	0	0	1	1	0	3	5
Below Time Std	6	15	5	17	57	35	135
Meeting Hit Std	5	7	4	7	19	18	60
Below Hit Std	1	8	1	11	38	20	80
"Successful" Eng	0	0	2	1	0	2	4
"Unsuccessful" Eng	6	15	5	17	57	36	136
Reasons for Unsuccessful Engagements:							
Aborted by Instr					3		3
Wrong Range				11	31		42
Wrong Lead		8			32		40
Wrong Sensing						5	5
Wrong Adjustment			2			20	22
Wrong Sight Picture	1						1

Conclusions based on results

The following conclusions can be reached based upon the data presented in the table above:

- more practice time is needed
- practice time is not balanced equally between ballistic and non-ballistic reticle use
- the time standards are probably inadequate for the tasks involved, and
- the practice event did not develop the skills called for by the Lesson Plan.

Continued on next page

Conclusion One: Need for more practice time

More practice time is needed if soldiers are to complete the minimum of 12 practice engagements. The data shows that the average number of engagements per soldier was approximately six (140/24 = 5.8). An increase in practice time should eliminate this shortfall in the amount of practice.

Note: To determine the minimum number of practice engagements, use the following formula:

number of separate engagements	X	number of reticle types	X	number of objective tasks	=	number of practice engagements

Example: Using the table on page 5-2, we can determine the number of practice engagements needed.

2 separate engagements moving and stationary)	X	2 reticles	X	3 objective tasks	=	12 practice engagements

Conclusion Two: Unequal balance of reticle use

More of the practice is being given with the ballistic reticle (81%), even though the data shows that the ballistic reticle engagements are not harder to master. This imbalance suggests either

- a reassessment of the requirements of the practice event, or
- on-site supervision by the principal instructor to ensure compliance with the Lesson Plan.

Continued on next page

CONCLUSIONS DRAWN FROM DATA, Continued

Conclusion Three: Unrealistic time standards	The time standards appear unrealistic for this stage of training. Only 4% of the engagements met the time standards. The remaining 96% were far in excess of the recommended 15 seconds. This needs to be reviewed and revised to become more realistic.
Conclusion Four: Skills were not developed	The practice event clearly did not develop the skills it was designed to develop. Only 3% of the engagements successfullly met the standards of the Lesson Plan. In general, soldiers had trouble with range lines on the ballistic reticle, leading targets, and adjusting fire.
Conclusions are based on objective data	Note that these conclusions are <u>not</u> based on subjective impressions, reconstructed memory, "expert" opinion, or observer's judgment. Instead, observers gathered <u>objective</u> data in the following ways: • the number of engagements were counted • times were taken with a stopwatch, <u>and</u> • hit/miss and reasons for "non-success" were recorded from the instructor's comments to the soldiers.

SUMMARY OF THE DATA COLLECTING PROCESS EXAMPLE

The importance of training

The conclusions discussed on the previous pages were reached because the observers had been trained how to collect detailed data during practice events. The observers knew how to record what they saw because of their training and supervised practice.

If they had used checklists (yes/no, OK/NOT OK, GO/NO GO), or had relied on their after-the-fact opinion, it would have been difficult if not impossible to reach any conclusions or substantiate the important points about the training.

Points brought out by practice event results

Efforts to explain away the results of the practice event (a poor crop of soldiers, bad weather, resource constraints, etc.) will not change the fact that the event did not proceed according to plan or attain what was planned.

The conclusions drawn from the practice event data bring out the following points and recommendations.

- Untrained soldiers, who are probably unprepared for what is to come, are progressing in the program.
- To bring these soldiers to an acceptable level of performance, extra training may have to be scheduled.
- If practice events are to be successful, modification of one or a combination of the following may be necessary:
  - the Tasks, Conditions, Standards, and/or Time Limits
  - the lesson plan, or
  - the implementation of the lesson plan.

SECTION SIX
ANALYZING TEST SCORE DATA

OVERVIEW

Introduction

A formal Training Program Evaluation (TPE) may often start after the training is over and a test has been administered.

If the test is a good measure of the training objectives, then the scores will provide information on the strong and weak points in the training.

Evaluate

To find out if it is a good test, the analyst needs to look at the observer's Worksheet 4, Testing Observation.

In this section

In this section we will show the analyst how to obtain the test scores and how to evaluate the test score data.

SECTION 6: ANALYZING TEST SCORE DATA	PAGE
Analyzing Test Score Data: Obtaining Scoresheets	6-2
Checking No Go Rates on the First Test	6-4
Example of a Test Schoresheet -- First Test	6-5
Checking No Go Rates on the First Retest	6-6
Example of Test Scoresheet -- First Retest	6-7

ANALYZING TEST SCORE DATA: OBTAINING SCORESHEETS

What analyst does	The Training Analyst may start the evaluation of a training program by analyzing the test score data.
Obtaining scoresheets	The analyst must first obtain scoresheets filled out by test examiners and blank score sheets in order to analyze the effectiveness of a training program. The blank scoresheets can be used to summarize test results if there are several test sites. The analyst should always obtain the original scoresheets unless there is an urgent need for the scoresheets somewhere else.
Copies of scoresheets	Copies of the scoresheets are acceptable only if the copies are made immediately after the testing is over and before the scoresheets have been reviewed by anyone.
Obtaining all the score-sheets	The analyst should obtain all scoresheets for the first test trial and the first retest. Remember: The soldiers being trained may be separated into several test sites for space or time constraints. So make sure you have all the test results. Note: The analyst should have the test examiners label the scoresheets indicating whether they are first test trial or first retest.
What the analyst does	The analyst should use blank scoresheets to summarize the test score information from the original scoresheets.
Example of blank scoresheet	On the next page is an example of a blank test scoresheet used for a Turret Training Course--Tracking Exercise. The analyst should obtain the blank scoresheets to summarize test score data.

Continued on next page

Sample — This is a sample scoresheet for the tracking exercise of the Turret Training Course.

SCORE SHEET
TURRET TRAINING COURSE
TRACKING EXERCISE

NAME _____ RANK _____ DATE _____

Note: The soldier will position himself in the gunner's seat prior to beginning the test.

START TIME _____ FINISH TIME _____

Requirement: Track shaded portion of tracking board using the

		GPS		GAS	
		yes	no	yes	no
Did the soldier: 1.	Keep the aiming point on shaded area of boards #1 and #2 without getting off for more than 3 seconds?	___	___	___	___
2.	Complete this requirement within 60 seconds.	___	___	___	___
Standard: Must have a yes on both items to receive a GO.		GO ___	NOGO ___	GO ___	NOGO ___

Requirement: Track a moving target using the:

		GPS		GAS	
		yes	no	yes	no
Did the soldier: 1.	Track the moving target without getting the aiming point off the target for more than 5 seconds?	___	___	___	___
2.	Complete this requirement within 30 seconds?	___	___	___	___
Standard: Must have a yes on both items to receive a GO.		GO ___	NOGO ___	GO ___	NOGO ___

Overall Standard: Must have a GO on all four requirements to receive an overall GO.

GO ___ NO GO ___

EVALUATOR _____ SOLDIER _____

Figure 1. Blank score sheet - Tracking Exercise.

CHECKING NO GO RATES ON THE FIRST TEST

What is done with the summary	The analyst will use the summarized test score data to see what the NO GO rate is for soldiers who took the test.
Remember	The suggested GO rate for any test is an acceptable percentage of soldiers taking the test.
Using the example	The example of the first test trial scoresheet on the next page shows the GO and NO GO rates for a test under the last item on the page. It is assumed that there is no problem with the test. The test shows that 30 out of 50 soldiers failed to meet the overall standard, which is an unacceptable NO GO rate of 60%. Remember: For all examples in this job aid, we are using 20% as the maximum NO GO rate for testing. Anything more is unacceptable.
Example of the scoresheet	An example of a test scoresheet summary prepared by an analyst can be found on the next page.

Continued on next page

EXAMPLE OF A TEST SCORESHEET—FIRST TEST

Test scoresheet example — This is an example of a first test scoresheet prepared by an analyst.

SCORE SHEET
TURRET TRAINING COURSE A COMPANY TEST
TRACKING EXERCISE

NAME _____ RANK _____ DATE 15 SEP 81

Note: The soldire will position himself in the gunner's seat prior to beginning the test. 50 SOLDIERS TESTED

START TIME 0800 FINISH TIME 1200

Requirement: Track shaded portion of tracking board using the

		GPS yes	GPS no	GAS yes	GAS no
Did the soldier: 1.	Keep the aiming point on shaded area of boards #1 and #2 without getting off for more than 3 seconds?	84% 42	16% 8	76% 38	24% 12
2.	Complete this requirement within 60 seconds.	47	3	45	5

Standard: Must have a yes on both items to receive a GO.	GO	NOGO	GO	NOGO
	42	8 16%	38	12 24%

Requirement: Track a moving target using the:		GPS yes	GPS no	GAS yes	GAS no
Did the soldier: 1.	Track the moving target without getting the aiming point off the target for more than 5 seconds?	25	25 10%	21	29
2.	Complete this requirement within 30 seconds?	45	5	40	10

Standard: Must have a yes on both items to receive a GO.	GO	NOGO	GO	NOGO
	25	25 50%	21	29 58%

Overall Standard: Must have a GO on all four requirements to receive an overall GO.

GO	NO GO
20	30
40%	60%

EVALUATOR _____ SOLDIER _____

Figure 1. Blank score sheet - Tracking Exercise.

CHECKING NO GO RATES ON THE FIRST RETEST

What the analyst does	The analyst can also use the first retest score summary to narrow down where and why the problems occurred during training. Note: The analyst should obtain test scoresheets which include the first retest (see example on the following page).
Using the retest data	The additional data from the first retest can help the analyst determine what the problems are. For example, in comparing the two scoresheets, look for the following: • the differences between the two scoresheets • for overall NO GO's • for specific areas of NO GO's.
Example	If after the retest, the number of NO GO's is considerably lower, then the problem is probably with the training and not with the testing. If specific tasks have a relatively high NO GO rate after retesting, then concentrate on those areas for evaluation.

EXAMPLE OF TEST SCORESHEET—FIRST RETEST

Retest scoresheet example

This is an example of a first retest scoresheet. Make sure to obtain the retest scoresheets when you get the test results.

SCORE SHEET
TURRET TRAINING COURSE
TRACKING EXERCISE

A COMPANY RETEST

NAME _____ RANK _____ DATE _____

Note: The soldier will position himself in the gunner's seat prior to beginning the test.

START TIME 0800 FINISH TIME 1200

OVERALL NOGO RATE AFTER RETEST

Requirement: Track shaded portion of tracking board using the

No. OF SOLDIERS RETESTED -- GPS yes 8 no; GAS yes 12 no

Did the soldier:	GPS yes	GPS no	GAS yes	GAS no
1. Keep the aiming point on shaded area of boards #1 and #2 without getting off for more than 3 seconds?	7	1	9	3
2. Complete this requirement within 60 seconds?	8	0	11	1

Standard: Must have a yes on both items to receive a GO.

GO	NOGO	GO	NOGO
7	1 (12%)	9	3 (16%)

Requirement: Track a moving target using the:

GPS yes 25 no (12%); GAS yes 29 no (16%)

Did the soldier:	GPS yes	GPS no	GAS yes	GAS no
1. Track the moving target without getting the aiming point off the target for more than 5 seconds?	19	6 (4%)	21	8 (10%)
2. Complete this requirement within 30 seconds?	23	2	24	5

Standard: Must have a yes on both items to receive a GO.

GO	NOGO	GO	NOGO
19	6 (12%)	21	8 (16%)

Overall Standard: Must have a GO on all four requirements to receive an overall GO.

GO 84% NO GO 16% OVERALL NO GO RATE AFTER 1ST RETEST

EVALUATOR _____ SOLDIER _____

Figure 1. Blank score sheet - Tracking Exercise.

SECTION 7:
THE ANALYSIS

OVERVIEW

The TPE analysis

Once all the data have been collected, The Training Program Evaluation (TPE) analysis should focus on the following seven areas:

- training objectives
- lesson plan
- training site
- lecture events
- demonstration events
- practice events
- testing events.

The analysis should be written so each of the seven areas are covered.

The analyst's job

The analyst's job at this point is to take all the information available and decide what the problems are and recommend changes to the training developer to eliminate those problems.

How to use this section

This section will guide the analyst through the evaluation. Each part of the training analysis will be broken down into the following 6 parts:

- how to find the evidence for training problems
- what is the training objective of the lesson being analyzed
- how is the training program analyzed
- what is an example of training problems
- what are the problems in the example, and
- what are the suggested changes for the training program example.

Continued on next page

In this section

In this section, the analyst will find a guide to analyzing the seven parts of a training program.

SECTION 7: THE ANALYSIS	PAGE
Training Objective	7-3
The Lesson Plan	7-5
Training Site	7-7
Lecture Events	7-9
Demonstration Events	7-12
Practice Events	7-15
Testing Events	7-19

TRAINING OBJECTIVE

Evidence for problems

Evidence for problems with the training objectives will come from the lesson plan analysis and the observer's comments on the Worksheet 1, Lesson Plan.

Definition: training objectives

The training objectives specify the intent of a training program.

The objectives should clearly state and describe

- the task
- the condition, and
- the standard.

How to analyze training

Use the following job aids and personnel to help analyze the training objectives.

- A Job Aid for the Evaluation of Lesson Plans
- A Job Aid for Recommending Training Program Modifications
- This job aid, page 3-8
- an educational technologist, if available.

Example

The following is an example of a training objective problem from the Worksheet 1, Lesson Plan. *The problems are explained* in detail following the example.

WORKSHEET 1, LESSON PLAN - PART II, Training Objectives

Lesson Title Operator Maintenance, M240 Machinegun

TRAINING OBJECTIVES

Task No	Objective	Source
1	Task: The soldier will perform operator maintenance on an M240 machinegun. ①	
	Condition: One M240 machinegun per two soldiers. ②	Lesson Plan #162509 dated Apr 79
	Standard: In accordance with TM 9-1005-313-10. ③	

Continued on next page

TRAINING OBJECTIVE, Continued

The problems

① The task statement does not specify what the soldier will do following training. "Perform operator maintenance" is not specific since it will allow the individual instructor to make a judgment on how the training is conducted.

② The conditions statement does not specify the exact conditions. The sharing of the machinegun can lead to a doer-watcher situation or the soldiers making it a 2 person task.

③ The standard only refers to the TM where the procedures are spelled out. Standards must be expressed in terms of accuracy and time.

Recommendations to the Training Developer

Use the following guidelines when correcting problems with the task, conditions and standards. The task must be spelled out or referenced to the TM by page and section.

- The conditions must be checked to see if they are accurate.
- The standard must be spelled out in terms of accuracy and time.

Example: The standard for a soldier could be to complete the task with no errors in four minutes.

THE LESSON PLAN

Evidence	Evidence for lesson plan problems will come from the lesson plan analysis and the observer's comments on • Worksheet 1, Lesson Plan • Worksheet 3, Training Observation
Definition: lesson plan	The lesson plan specifies in detail what should happen during each training event.
How to analyze lesson plan	Use the following job aids and personnel to help analyze the lesson plan: • an educational technologist who can describe and evaluate the learning activities for teaching required skills and knowledge, or • this job aid, page 3-2 • A Job Aid for the Evaluation of Lesson Plans, and • A Job Aid for Observing Training.

Continued on next page

Example

The following is an example of a problem with a lesson plan from the Worksheet 1, Lesson Plan. The problems are explained in detail on the next page.

WORKSHEET 1, LESSON PLAN - PART III, Training Events

Lesson Title Operator Maintenance, M240 Machinegun

TRAINING EVENTS

Task No	Event Type	Events	Occur Yes	Occur No	Comments
1	TERM	M240 terminology given to soldiers (no detail in lesson plan)	✓ ①		INSTRUCTOR COVERED BARREL ASSY, BARREL LOCKING LATCH, BARREL RELEASE, COVER ASSY, COVER LATCHES, FEED TRAY, FLASH HIDER, RECEIVER ASSY, RECEIVER GAS CYLINDER, REGULATOR NUT, BUFFER ASSY, TRIGGER AND FRAME ASSY, CHARGER HANDLE.
1	DEMO	Demo disassembly	✓		SEE WORKSHEET 3.
1	DEMO	Demo assembly	②	✓	SEE WORKSHEET 3.
1	PRAC	Disassembly	✓		TRAINING SECTIONS DIFFERED.
1	PRAC	Assembly	✓		AT SOME, EACH SOLDIER DID BOTH. AT OTHERS, SOME DID ASSEMBLY, SOME DISASSEMBLY. NO CONSISTENT STANDARDS.

Continued on next page

The problems	① The lesson plan did not detail what terms must be explained to the soldiers. This allows instructors to define whatever they think is necessary. ② The lesson plan does not spell out in detail the essential steps and actions of each demonstration.
Recommendation to the Training Developer	The list of terms must be checked against TM 9-1005-313-10, and if the list is accurate, then it should be added to the lesson plan. The essential steps and actions, tasks and subtasks must also be listed.

THE TRAINING SITE

Evidence

Evidence for training site problems will come from the observer's comments on Worksheet 2, Training Environment.

Definition: training site

The training site includes such things as:

- building contents (if any)
- training equipment and materials
- training aids
- light
- temperature
- noise level, and
- distractions.

How to analyze training site

Use the following job aids to help describe the training site:

- Worksheet 2, Training Environment
- A Job Aid for Observing Training, and
- A Job Aid for Recommending Training Program Modifications.

Example

The following is an example of evidence for training site problems from Worksheet 2. The problems are explained in detail below.

WORKSHEET 2, TRAINING ENVIRONMENT

Environmental Factors	Yes	No	NA	Comments
1 - Were enough instructors present to provide adequate supervision and assistance?		✓		ONLY 4 STATIONS OPERATING. SOLDIERS WERE STANDING AROUND WAITING.
19 - Was any training left out as the result of an interruption?	✓			VIP TOUR CAME IN DURING DEMO. INSTRUCTOR MISSED "ASSEMBLY". NOT ENOUGH TIME LEFT AFTER TOUR TO PICK IT UP.

The problems

- Soldiers were seen standing around and waiting. (Question 1)
- Soldiers did not practice both required subtasks. (Question 19)

Recommendation to Training Developer

Remedial training may be needed for the soldiers if test results are unacceptable.

LECTURE EVENTS

Evidence	Evidence for lecture event problems will come from the observer's comments on the Worksheet 1, Lesson Plan and Worksheet 3, Training Observation.
Definition: lecture events	A lecture event is any training event where the primary activity is the exchange of information. These events are sometimes called conferences or discussions.
How to analyze lecture events	Use the following job aids to help you analyze the lecture events: • A Job Aid for Observing Training, page 3-1 • A Job Aid for the Evaluation of Lesson Plans, Question 7 • A Job Aid for Recommending Training Program Modifications page 4-9, and • Worksheet 3, Training Observation

Continued on next page

Example

The following is an example of evidence for lecture event problems from Worksheets 1 and 3. The problems are explained in detail on the next page.

WORKSHEET 1, LESSON PLAN - PART III, Training Events

Lesson Title Operator Maintenance, M240 Machinegun

TRAINING EVENTS

Task No	Event Type	Events	Occur Yes	Occur No	Comments
1	TERM	M240 terminology given to soldiers (no detail in lesson plan)	✓		INSTRUCTOR COVERED BARREL AESY, BARREL RELEASE, COVER. ASSY, COVER LATCHES, FEED TRAY, FLASH HIDER, RECEIVER ASSY, TRIGGER AND FRAME ASSY, CHARGER HANDLE

WORKSHEET 3, TRAINING OBSERVATION

PART I, LECTURE/CONFERENCE

Observations	YES	NO	NA	Commments
27 - Were soldiers told the training objectives, including tasks, conditions, and standards?		✓		NOT COVERED. INSTRUCTOR TOLD THEM THAT HE WAS GOING TO TEACH THEM TO ASSEMBLE/DISASSEMBLE THE M240.
28 - Were soldiers told why this training is necessary?		✓		
30 - Were soldiers told how this training fits in with previous and future training?		✓		DID NOT CONNECT WITH FIELD FIRING ON NEXT WEEK'S TRAINING SCHEDULE.
36 - Did the instructor provide the concepts and terminology needed by the soldiers?	✓			SEE LIST ON WORKSHEET #1.

Continued on next page

The problems	• The instructor did not prepare the soldiers for the block of instructions. (Question 27) • The instructor did not tell the soldiers what the tasks or subtasks were and why they were learning them. (Question 28) • The instructor did not tell the soldiers the conditions under which they must perform or what they must do to receive a GO. (Question 30)
Recommendation to the Training Developer	The lesson plan should be changed to include the necessary lecture events. If the instructor did not handle the lecture events very well, then the training manager must determine the reasons for the oversight.

DEMONSTRATION EVENTS

Evidence	Evidence for demonstration event problems will come from the observer's comments on the • Worksheet 1, Lesson Plan • Worksheet 3, Training Observation.
Definition: demonstration	A demonstration event is any training event where the soldiers are shown how to perform a task or a subtask.
How to analyze demonstration events	Use the following job aids to help you analyze the demonstration events: • A Job Aid for Observing Training • A Job Aid for Recommending Training Program Modifications, and • Worksheet 3, Training Observation.

Continued on next page

Example — The following is an example of evidence for demonstration event problems from Worksheets 1 and 3. The problems are explained in detail on the next page.

WORKSHEET 1, LESSON PLAN - PART III, Training Events

Lesson Title Operator Maintenance, M240 Machinegun

TRAINING EVENTS

Task No	Event Type	Events	Occur Yes	Occur No	Comments
1	DEMO	Demo disassembly	✓		SEE WORKSHEET 3.
	DEMO	Demo assembly		✓	SEE WORKSHEET 3.

WORKSHEET 3, TRAINING OBSERVATION

PART II, DEMONSTRATION/PRACTICE

Observations	YES	NO	NA	Commments
38 - Was each subtask demonstrated?		✓		MISSED TASK 1 - ASSEMBLY. CLASS INTERRUPTED.
40 - Could demonstrations be seen and heard by all soldiers?		✓		I COULDN'T HEAR. SOLDIERS IN BACK OF CLASS ASKING EACH OTHER WHAT INSTRUCTOR SAID. NO PROBLEM SEEING DEMO.
41 - Were demonstrations conducted in small enough steps so that the soldiers could easily follow the instructor's actions?		✓		INSTRUCTOR WENT THROUGH IMMEDIATE ACTION BUT SOLDIERS DID NOT FOLLOW VERY WELL. SIX QUESTIONS ON HAND CYCLING AND "SHFE" DURING DEMO. SEE #50 ON THIS.

Continued on next page

DEMONSTRATION EVENTS, Continued

The problems	• The soldiers could not hear the demonstration. (Question 40) • The soldiers could not follow or understand all of the subtask steps. (Question 41)
Recommendation to the Training Developer	The training developer should look at the demonstration sequence to see if it as effective as possible. • If the demonstration sequence is wrong then the lesson plan should be changed. • If the instructor did not follow the lesson plan, then additional instructor training is needed.

PRACTICE EVENTS

Evidence	Evidence for practice event problems will come from the observer's comments on the Worksheet 1, Lesson Plan and the Worksheet 3, Training Observation.
Definition: practice event	A practice event is where skills are developed and brought to standard.
How to analyze practice events	Use the following job aids to help you analyze the practice events. • A Job Aid for the Observing Training • A Job Aid for Recommending Training Program Modifications, page 4-1

Continued on next page

Example — The following is an example of evidence for practice event problems from Worksheets 1 and 3 and notes from the observer. The problems are explained in detail on the next page.

WORKSHEET 1, LESSON PLAN - PART III, Training Events

Lesson Title Operator Maintenance, M240 Machinegun

TRAINING EVENTS

Task No	Event Type	Events	Occur Yes	Occur No	Comments
1	PRAC	Disassembly	✓		TRAINING STATIONS DIFFERED. AT SOME, EACH SOLDIER DID BOTH. AT OTHERS, SOME DID ASSEMBLY - SOME DID DISASSEMBLY. NO CONSISTENT STANDARDS.
	PRAC	Assembly	✓		

WORKSHEET 3, TRAINING OBSERVATION

PART II, DEMONSTRATION/PRACTICE

Observations	YES	NO	NA	Commments
43 - Did all soldiers practice?	✓			BUT NOT TO STANDARD.
47 - Did each soldier practice each subtask to standard, unassisted, before going on to whole task practice?		✓		27 SOLDIERS DID ALL OF TASK 1, 12 SOLDIERS ASSEMBLY ONLY, 19 SOLDIERS DISASSEMBLY ONLY. SEE NOTE BELOW.
49 - Were the soldiers required to meet the overall standard in performing the entire task unassisted?		✓		INSTRUCTORS WERE NOT APPLYING A STANDARD. EACH SOLDIER DID IT ONCE - RIGHT OR WRONG.
50 - Did a lot of soldiers have trouble with the same step during practice?	✓			16 DID NOT HAND CYCLE DURING IMMEDIATE ACTION. 43 FORGOT TO PUT ON SAFE WHEN PULLING CHARGING HANDLE TO REAR.

Continued on next page

Example, (continued)

WORKSHEET 3, TRAINING OBSERVATION

PART II, DEMONSTRATION/PRACTICE

Observations	YES	NO	NA	Commments
55 - Was feedback provided as soon as possible following actions?		✓		ERRORS POINTED OUT WHEN SUBTASK WAS COMPLETED.
57 - Was faulty performance identified and corrected?		✓		ERRORS POINTED OUT BUT NO SECOND TRIALS WERE ALLOWED, SO SOLDIERS COULD GET IT RIGHT ONE TIME.
PART III, GENERAL OBSERVATIONS				
70 - Were the soldiers sometimes standing around with nothing to do during training?	✓			ONLY 4 STATIONS. MOST SOLDIERS WAITING FOR HALF THE PERIOD OR MORE.

Note:

Station	# Soldiers	Practiced: Assembly	Practiced: Disassembly	# To Standard
1	14	𝍸 𝍸 𝍸

Recommendation to the Training Developer	The training developer should do the following: • revise the lesson plan so that each soldier is required to demonstrate task proficiency. • provide instructors/assistant instructors with remedial instructor training. Note: Instructor and supervisor problems should be handled cautiously.

TESTING EVENTS

Evidence	Evidence for testing event problems will come from the observer's comments on the • Worksheet 1, Lesson Plan • Worksheet 4, Testing Observation.
Definition: testing events	A testing event tells the instructors and soldiers what skills and knowledges the soldiers have learned and how successful the training has been in achieving training to objectives.
How to analyze testing events	Use the following job aids to help you analyze the testing events. • A Job Aid for the Observation of Training • A Job Aid for Recommending Training Program Modifications, and • Worksheet 4, Testing Observation.

Continued on next page

Example

The following is an example of evidence for testing event problems from the observer's Worksheet 4 and test scoresheets. The problems are explained in detail on page 92.

WORKSHEET 4, TESTING OBSERVATION

Observations	YES	NO	NA	Commments
93 - Were pass/fail standards clearly explained such that soldiers would know when they performed correctly?	✓			READ FROM TEST INSTRUCTION SHEET. NO QUESTIONS FROM SOLDIERS.
94 - Did the test occur soon after the completion of training?	✓			IMMEDIATE AFTER FINAL PRACTICE EVENTS.
98 - Were the standards specified in the training objectives used to score test performance?	✓			EXAMINERS DID NOT HAVE STOP WATCHES AND TESTED TWO SOLDIERS AT A TIME. TIME STANDARDS NOT RIGID. SEE #104, #105 AND #106.
104 - Did the examiner help the soldiers in any way during the test?	✓			# SOLDIERS OVERTIME BUT GIVEN GO. REQ STA 1 STA 2 1 2 3 ----- 2 ----- 1 4 ----- 1 5 6 ----- 2 ----- 1 EXAMPLE: TWO SOLDIERS AT STATION 1 AND ONE SOLDIER AT STATION 2 RECEIVED HELP WITH THE THIRD REQUIREMENT.
105 - Did the examiners apply the standards specified in the training objectives consistently and objectively?		✓		

Continued on next page

Example (continued)

WORKSHEET 4, TESTING OBSERVATION, Continued

Observations	YES	NO	NA	Comments
106 - Did the soldiers receive artificial cues or help during the test?	✓			# SOLDIERS GIVEN CUES REQ STA 1 STA 2 1----- 10----- 2 2 3----- 4----- 1 4----- 8----- 3 5 6----- 6----- 2

BASIC ARMOR TEST

	NO GO's added - See #106 on Worksheet 4	GO	NO GO 1st	NO GO 2nd	NO GO 3rd	NO GO 4th	REMARKS	
STATON # 1	M240 MACHINEGUN						NO GO Rates Official	Adjusted
REQ 1	Clear M240 +12 NO GO	38	20				14%	34%
REQ 2	Disassemble	53	5				9%	9%
REQ 3	Reassemble + 8 NO GO	41	17				16%	29%
REQ 4	Function Check + 12 NO GO	39	19				12%	33%
REQ 5	Load the M240	57	1				2%	2%
REQ 6	Immediate Action + 11 NO GO	36	22				19%	38%

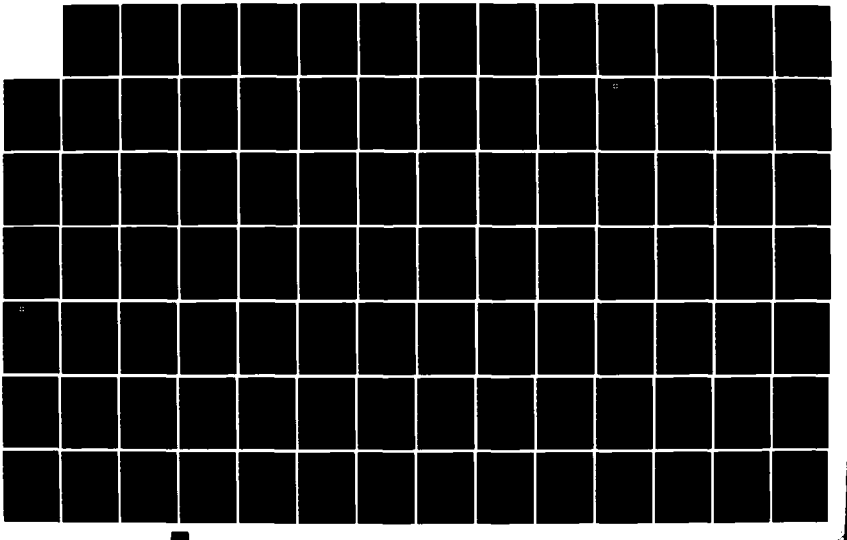
Note: Adjust NO GO rates based on problems identified while soldiers took the test. If, for example, the examiners gave illegal hints, or gave a GO to a substandard performance, those GO scores would be "adjusted" to NO GO.

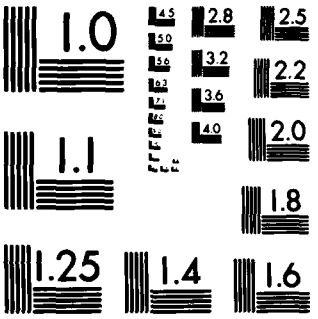
Continued on next page

The problems	• Test examiners aided soldiers during the test by giving clues and overlooking time standards. (Questions 104 and 106) • Adjusted test scores had NO GO rates of 20% and above. (test score sheet) Note: NO GO rates should be adjusted when soldiers were aided during a test by an examiner.
Recommendation to Developer	The block of instructions must be analyzed to find out why the soldiers needed help during the test and why the testing process was not followed by examiners.

AD-A145 077 HOW TO EVALUATE TRAINING(U) IMPERIAL IRANIAN GROUND FORCES COMBAT RESEARCH AND EVALUATION CENTER 30 SEP 82 DAAG29-18-D-0100 2/4

UNCLASSIFIED F/G 5/9 NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

SECTION 8
THE TPE REPORT

OVERVIEW

Introduction

The analyst must write a final report upon the completion of a Training Program Evaluation (TPE). The report will be based on the analysis of information and data collected on the lesson or block of instruction evaluated.

What does report include

The report includes

- background information on the evaluation
- results of the evaluation, and
- recommended changes for the training program.

In this section

This section explains how to prepare a TPE report and gives an example.

SECTION 8: THE TPE REPORT	PAGE
TPE Report	8-2
The Final Report	8-4

TPE REPORT

Reporting TPE results

The Training Program Evaluation (TPE) results should be reported to the training developer and the user.

Balance the report

The analyst should balance the report with positive and negative comments.

The focus of negative comments should be on those few problems which have the greatest impact on the training program.

List comments

The analyst should first write the comments into lists like the example on this page.

AREA	POSITIVE	NEGATIVE
Objectives	• Lead to performance oriented training. • Are actually spelled out in the body of the lesson plan (but are hard to follow in that form).	• Task statement does not specify what the soldier will do following training. • Condition statement does not say enough. • Standard is not a standard
Training Plan	• Follows the usually accepted models for training (lecture, demonstration, practice, test).	• Required terms are not detailed in the lesson plan. • Demonstration procedures are not spelled out. • Procedures for conducting practice events are not spelled out.
Training Site	• Training equipment, materials, lighting, noise, etc., were all right (no negative comments by observer).	• Not enough assistant instructors available. • Class interrupted.
Lecture Events	• Terms needed by soldiers given to them by instructor.	• Objectives and reason for training not given to soldiers.

Continued on next page

List comments (continued)

AREA	POSITIVE	NEGATIVE
Demonstration Events	• All soldiers could see the charts. • Each subtask was demonstrated.	• Some soldiers had trouble hearing. • Soldiers had trouble following "immediate action". • "Hand cycling" and "safe" led to questions.
Practice Events	• All soldiers practiced (no walk-throughs or talk-throughs substituted for hands-on practice).	• All soldiers did not practice all subtasks. • Soldiers were not required to perform to standard. • Feedback to soldiers delayed to end of practice trail. • Soldiers had problems with "charging handle" and "safe".
Testing Events	• Instructions read to soldiers from lesson plan. • Pass/fail standards read to soldiers. • All subtasks were tested.	• Standards not enforced. • Some soldiers were given cues during testing.

How much detail

The analyst should be as detailed as possible in the final report.

The analyst should also write an abbreviated version of the report for the command element.

What to include

The analyst should cover the seven areas of the training program in the TPE report.

Example

The following pages give an example of a good Training Program Evaluation Report. This sample only covers one objective, while a real report would likely cover several.

Sample report

General information

Report date	
Course	
User	
Analyst	

Objectives: problems

- The task statement does not specify what the soldier will do following training.
- Current wording does not provide clear guidance regarding the goal of this training.
- The conditions statement does not clearly spell out the conditions under which the task must be performed.
- The standard does not provide the instructional staff with immediate guidance regarding what constitutes a "GO" and a "NO GO".

Objectives: recommendation

Recommend that the training objective be rewritten following the guidance in Section II, A Job Aid for Recommending Training Program Modifications.

Lesson plan

- The terms needed by the soldiers for performance of this task have been left out of the lesson plan.
- The plan calls for each subtask to be demonstrated but does not provide guidance for these demonstrations that covers the essential steps and alerts the instructors to difficult or novel actions that should be emphasized.
- Practice events are required by the lesson plan for each subtask but detailed guidance is missing for instructors on
  - how to conduct these events
  - what soldier errors to look for during practice, and
  - how to correct faulty performance

Continued on next page

Sample report (continued)

Lesson plan: recommendation	Recommend that a detailed training prescription be written for this training that spells out, in detail, procedures for conducting the lecture, demonstration, and practice events. Guidance for this can be found in • A Job Aid for the Evaluation of Lesson Plans, and • A Job Aid for Recommending Training Program Changes.
Training site	Their training site was prepared so • there was enough training equipment to go around • all training equipment worked properly • the prepared layout of the training site made it easy to see the demonstrations • the site was reasonably quiet • there was enough light for the soldiers to see what was going on.
Training site: recommendation	Recommend that the lesson plan be revised to include a larger number of instructors. See A Job Aid for Recommending Training Program Modifications.
Lecture events	Instructors followed the lesson plan as best as they could given the vague prescription for these events. The primary instructor filled in where the lesson plan was vague and provided the soldiers with the terminology from TM 9-1005-313-10. The primary instructor did not • provide the soldiers with a clear description of the training objective • indicate why this training is necessary now, and • indicate how this training fits in with previous and future training.

Continued on next page

Sample report (continued)

Lecture events: recommendation	These problems may yield to a revised lesson plan that specifies the procedures for conducting the lecture event. See the Job Aid for Recommending Training Program Modifications.
Demonstration events	• All subtasks were demonstrated with the exception of the "assembly" subtask. • Some soldiers had difficulty hearing the demonstrations. • Instructors could usefully be reminded to ensure that all soldiers can hear adequately. • Some soldiers had trouble following "hand cycling" and "safe" during the demonstration.
Demonstration events: recommendation	Recommend a revised lesson plan that specifies the procedures for conducting the demonstration events. See the Job Aid for Recommending Training Program Modifications.
Practice events	All soldiers received hands-on practice. • Twenty-seven soldiers practiced all the subtasks, 12 practiced "assembly" only, and 19 practiced "disassembly" only. • No data is available on the extent to which soldiers were reaching the standard since the instructors were not applying the standard during practice. • Two steps in performing this task proved difficult for a number of soldiers. Sixteen did not "hand cycle" during immediate action and 43 forgot to put the weapon on safe when pulling the charging handle to the rear. • Instructors were pointing out soldier errors when the task was completed instead of when the error occurred. • Faulty performance was identified but not corrected since no soldier had a chance to try the task again to see he/she could perform without the error. • There seems to have been a resource problem with this administration of the lesson in that only four assistant instructors were available.

Continued on next page

Sample report (continued)

Practice events: recommendation	Recommend a revised lesson plan that presents clear guidance to the instructors on • how to conduct this practice event • what to look for during soldier practice • how to identify and correct faulty performance, and • what resource requirements and tradeoffs between time allocation and number of instructional personnel are needed. See the Job Aid for Recommending Training Program Modifications.

Testing events	• Instructions were read directly from the lesson plan.
	• Soldiers had no questions on what the tasks were.
	• Soldiers had no questions on the standards.
	• The test occurred soon after training to minimize forgetting.
	• All tasks were tested.
	• Examining personnel were not the same as instructional personnel.
	• The test was not scored in a consistent manner.
	• When it came to scoring soldier performance, examiners did not have stopwatches and tested two soldiers at a time. Seven soldiers were given a "GO" when they had exceeded the specified time standard.
	• Thirty-six soldiers were given
	  • hints
	  • prompts, or
	  • cues.

Testing events: recommendation	Recommend that test examiners be given additional training and supervision on how to score soldiers' performance in a consistent manner. See A Job Aid for Recommending Training Program Modifications.

SECTION NINE
DEVELOPING QUESTIONNAIRES FOR SOLDIERS AND INSTRUCTORS

OVERVIEW

Introduction

The analyst will sometimes be called upon to evaluate training without the necessary amount of time or resources.

Instead of conducting a full scale TPE evaluation as described in this job aid, the analyst can conduct an evaluation by questioning soldiers and/or instructors about their training experiences or their perceptions about the training.

The questionnaires

The questionnaire should provide valid and meaningful data.

In order for the analyst to do this, technical assistance may be necessary from someone who has an expertise in developing questionnaires.

Note: Technical assistance is not always available. Follow the guidelines in this section to keep from making any serious mistakes in developing a questionnaire.

What type of questions

Questions should be related to the recent experiences that occurred during a training program.

Several precautions on questions

Do not ask the following types of questions when conducting this type of training evaluation:

- ask soldiers or instructors for their general impressions
- ask soldiers or instructors for opinions about training
- ask soldiers to rate the quality of the training they received.

These types of questions will not provide the data needed by an evaluator.

Continued on next page

In this section

This section explains how to develop questionnaires for soldiers and instructors when a full TPE is not feasible.

SECTION NINE: DEVELOPING QUESTIONNAIRES FOR SOLDIERS AND INSTRUCTORS	PAGE
Questioning Soldiers About Formal Instructions	9-3
Questioning Soldiers About Proficiency and Events Outside Formal Training	9-4
Questioning Instructors About Instruction	9-6

QUESTIONING SOLDIERS ABOUT FORMAL INSTRUCTIONS

Introduction	Question soldiers who were present for training <u>when</u> an observer cannot be present at a training event. Use the soldiers' memories to get information on what happened.
How many should be questioned	Several <u>but</u> not all soldiers will need to be questioned to get a consistent answer to any question. It is not necessary to ask each soldier the same set of questions.
What type of questions	You will want to construct most of the questions to get <u>**YES**</u> or <u>**NO**</u> answers. Do not expect the soldiers to give detailed answers from memory. Ask the questions in words and about experiences that have meaning for the soldiers.
How many questions	If you have more than 5 questions, get two different groups of soldiers from the training. Ten to fifteen questions is a good number for this type of TPE. Give some questions to one group and the remaining questions to the second group.
Examples of questions	Some examples of the kinds of questions soldiers can be asked are below. • Were instructors available when you needed them? • Did you have a _____ (tool, handout, piece of equipment) when you needed it? • Did you have your own copy of _____ (handout)? • Do you know what _____ (a term or concept) means? • Was the _____ (task, subtask, step) demonstrated for you by the instructor? • Could you _____ (see, hear, understand) the demonstration of _____ (task, subtask, step)? • Did you get a chance to practice the _____ (task, subtask, step)? • Did an assistant instructor watch you during practice, correcting your errors as you went along?

QUESTIONING SOLDIERS ABOUT PROFICIENCY AND EVENTS OUTSIDE FORMAL TRAINING

Introduction

An analyst can also ask soldiers about

- how confident they feel about performing a training task, and
- what they know about events occurring outside the formal training station.

Important

Be careful to only use confidence ratings as indicators of morale, not proficiency.

Soldiers tend to give unrealistic high estimates of their ability to perform the task in question.

What soldiers can answer

Soldiers can answer questions about what is happening to them because they are in a training environment.

You can question them on the following:

- rumors
- things that happen during non-training time (phantom training, rewards/punishments for good/poor performance, etc.)
- administrative matters (post-training assignments, bonuses, UCMJ Articles, pay and allowances, etc.), and
- any other item on which they have information or misinformation.

How questions should be asked

Keep the questions simple. Carefully word each question so it means the same thing to each soldier.

Avoid two questions in one sentence and keep the number of answer categories small.

Continued on next page

QUESTIONING SOLDIERS ABOUT PROFICIENCY AND EVENTS OUTSIDE FORMAL TRAINING, Continued

Examples of questions

Some examples of the kinds of questions that can be asked are:

- I know how to be a loader on an AI Tank.

  Yes
  Need More Training First
  No

- I understood [Most / Some / None] of the NBC spot report training.

- Did you get to practice assembly/disassembly of the M240 Machinegun after regular training?

  Yes _____ (How many times? _____)
  No _____

QUESTIONING INSTRUCTORS ABOUT INSTRUCTION

Introduction	Instructors can add to your knowledge about "what" happened during training from their perspective. Instructors can give you more information and you can ask more questions.
What type of questions	You do not have to stick to simple yes or no answers for instructors. Answers can be written to provide you with enough detail.
Examples of questions	• Did you have enough assistant instructors to cover the stations during practice? • Did you have what you needed to conduct this training? (If "no," what was missing?) • Are there any problems with the site selected for this training (light, noise, facilities, etc.)? • Did the weather affect training? (If "yes," how?) • Do you need more (less) time for this block of instruction? (If "yes," why?)

APPENDIX A

PRACTICE EVENT DATA

Introduction — The data here and on the following pages was collected by an observer for each soldier at each practice event station.

Station 1

Soldier	Engagement Number/Type	Time (sec)	Hit Miss	Instructor Comments
1	1/BM			Aborted by instructor. Soldier did not know how to use ballistic reticle.
	2/BM	52	Miss	Wrong range, wrong lead.
	3/BM	47	Miss	Wrong range.
	4/BM	56	Hit	
	5/BSA	74	Miss	Wrong sensing, wrong adjustment.
	6/BSA	65	Miss	Wrong adjustment.
	7/BSA	59	Hit	
2	1/BM	34	Miss	Wrong range, wrong lead.
	1/BM	39	Miss	Wrong range.
	3/BM	42	Hit	
	4/BSA	41	Miss	Wrong adjustment.
	5/BSA	46	Miss	Wrong adjustment.
	6/BSA	39	Hit	

Note: The following abbreviations are used in the Engagement Number/Type column of tables:

- BS - Ballistic Reticle, Stationary
- NBS - Non-Ballistic Reticle, Stationary
- BM - Ballistic Reticle, Moving Target
- NBM - Non-Ballistic Reticle, Moving Target
- BSA - Ballistic Reticle, Sense and Adjustment
- NBSA - Non-Ballistic Reticle, Sense and Adjustment

Continued on next page

PRACTICE EVENT DATA, Continued

Station 1, (continued)

Soldier	Engagement Number/Type	Time (sec)	Hit Miss	Instructor Comments
3	1/BM		.	Aborted by instructor. Soldier did not know how to use ballistic reticle.
	2/BM	78	Miss	Wrong range, wrong lead.
	3/BM	81	Miss	Wrong range, wrong lead.
	4/BM	66	Miss	Wrong range, wrong lead.
	5/BM	60	Hit	
	6/BM	43	Hit	

Note: The following abbreviations are used in the Engagement Number/Type column of tables:

- BS - Ballistic Reticle, Stationary
- NBS - Non-Ballistic Reticle, Stationary
- BM - Ballistic Reticle, Moving Target
- NBM - Non-Ballistic Reticle, Moving Target
- BSA - Ballistic Reticle, Sense and Adjustment
- NBSA - Non-Ballistic Reticle, Sense and Adjustment

Soldier	Engagement Number/Type	Time (sec)	Hit Miss	Instructor Comments
4	1/BM	29	Miss	Wrong lead.
	2/BM	22	Hit	
	3/BSA	46	Miss	Wrong adjustment.
	4/BSA	38	Miss	Wrong adjustment.
	5/BSA	38	Miss	Wrong adjustment.
	5/BSA	25	Hit	

Continued on next page

PRACTICE EVENT DATA, Continued

Station 1 (continued)

Soldier	Engagement Number/Type	Time (sec)	Hit Miss	Instructor Comments
5	1/BM	26	Miss	Wrong lead.
	2/BM	34	Miss	Wrong lead.
	3/BSA	32	Hit	
	4/BSA	39	Hit	
6	1/BM	37	Miss	Wrong range, wrong lead
	2/BM	39	Miss	Wrong range, wrong lead.
	3/BM	46	Hit	
	4/BSA	62	Miss	Wrong adjustment.
	5/BSA	66	Miss	Wrong sensing, wrong adjustment.
	6/BSA	64	Hit	

Continued on next page

PRACTICE EVENT DATA, Continued

Station 2

Soldier	Engagement Number/Type	Time (sec)	Hit Miss	Instructor Comments
1	1/NBS	19	Miss	Wrong sight picture.
	2/NBS	22	Hit	
	3/NBM	34	Miss	Wrong lead.
	4/NBM	39	Miss	Wrong lead.
	5/NBSA	50	Miss	Wrong adjustment.
	6/NBSA	56	Miss	Wrong adjustment.
	7/BS	34	Miss	Wrong range.
	8/BS	35	Miss	Wrong range.
	9/BM	77	Miss	Wrong range, wrong lead.
	10/BM	84	Miss	Wrong range, wrong lead.
	11/BSA	66	Miss	Wrong adjustment.
	12/BSA	83	Miss	Wrong adjustment.
2	1/NBS	26	Hit	
	2/NBS	21	Hit	
	3/NBM	39	Miss	Wrong lead.
	4/NBM	30	Hit	
	5/NBSA	61	Hit	
	6/NBSA	30	Hit	
	7/BS	54	Miss	Wrong range.
	8/BS	51	Miss	Wrong range.
	9/BM	48	Miss	Wrong range, wrong lead.
	10/BM	35	Miss	Wrong lead.
	11/BSA	47	Miss	Wrong adjustment.
	12/BSA	58	Hit	

Continued on next page

PRACTICE EVENT DATA, Continued

Station 2 (continued)

Soldier	Engagement Number/Type	Time (sec)	Hit Miss	Instructor Comments
3	1/NBS	55	Hit	
	2/NBS	40	Hit	
	3/NBM	46	Miss	Wrong lead.
	4/NBM	45	Hit	
	5/NBSA	62	Hit	
	6/NBSA	50	Hit	
	7/BS	37	Miss	Wrong range.
	8/BS	21	Hit	
	9/BM	35	Hit	

Station 3

Soldier	Engagement Number/Type	Time (sec)	Hit Miss	Instructor Comments
1	1/BS	26	Miss	Wrong range.
	2/BS	55	Hit	
	3/BM	74	Miss	Wrong lead.
	4/BM	67	Hit	
	5/BM	60	Hit	
	6/BSA	84	Hit	

Continued on next page

PRACTICE EVENT DATA, Continued

Station 3 (continued)

Soldier	Engagement Number/Type	Time (sec)	Hit Miss	Instructor Comments
2	1/BS	14	Hit	
	2/BM	32	Hit	
	3/BM	27	Hit	
	4/BSA	36	Miss	Wrong adjustment.
	5/BSA	42	Hit	
3	1/BS	25	Miss	Wrong range.
	2/BS	37	Miss	Wrong range.
	3/BS	35	Miss	Wrong range.
	4/BS	34	Miss	Wrong range.
	5/BS	38	Hit	
	6/BM	94	Miss	Wrong range, wrong lead.
	7/BM	79	Miss	Wrong range, wrong lead.
	8/BM	90	Miss	Wrong range, wrong lead.
	9/BM	82	Miss	Wrong range.
	10/BM	70	Miss	Wrong range.
	11/BM	88	Miss	Wrong range, wrong lead.
	12/BSA	94	Miss	Wrong sensing, wrong adjustment.
	13/BSA	85	Miss	Wrong sensing, wrong adjustment.
	14/BSA	89	Miss	Wrong adjustment.
	15/BSA	64	Miss	Wrong adjustment.
	16/BSA	69	Miss	Wrong adjustment.
	17/BSA	76	Hit	

Continued on next page

PRACTICE EVENT DATA, Continued

Station 3 (continued)

Soldier	Engagement Number/Type	Time (sec)	Hit Miss	Instructor Comments
4	1/BS	28	Miss	Wrong range.
	2/BS	35	Hit	
	3/BM	38	Miss	Wrong range, wrong lead.
	4/BM	30	Miss	Wrong lead.
	5/BM	42	Hit	
	6/BSA	40	Miss	Wrong adjustment.
	7/BSA	65	Hit	
	8/BSA	53	Hit	

Continued on next page

PRACTICE EVENT DATA, Continued

Station 4

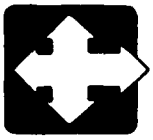
Soldier	Engagement Number/Type	Time (sec)	Hit Miss	Instructor Comments
1	1/NBM	27	Miss	Wrong lead.
	2/NBM	29	Miss	Wrong lead.
	3/NBM	24	Hit	
	4/BM			Aborted by instructor. Soldier did not know how to use ballistic reticle.
	5/BM	75	Miss	Wrong range, wrong lead.
	6/BM	84	Miss	Wrong range, wrong lead.
	7/BM	74	Miss	Wrong range, wrong lead.
	8/BS	66	Hit	
	9/BS	51	Hit	
	10/BM	64	Miss	Wrong lead.
	11/BM	68	Miss	Wrong lead.
	12/BM	74	Hit	
	13/BM	60	Hit	
2	1/NBM	25	Hit	
	2/BM	49	Hit	
	3/BSA	46	Hit	
	4/BSA	28	Hit	

Continued on next page

PRACTICE EVENT DATA, Continued

Station 4 (continued)

Soldier	Engagement Number/Type	Time (sec)	Hit Miss	Instructor Comments
3	1/NBM	37	Miss	Wrong lead.
	2/NBM	46	Hit	
	3/BM	51	Miss	Wrong range, wrong lead.
	4/BM	40	Miss	Wrong range, wrong lead.
	5/BM	27	Hit	
	6/BSA	32	Hit	
	7/BSA	48	Hit	
4	1/NBM	18	Miss	Wrong lead.
	2/NBM	28	Hit	
	3/BM	36	Miss	Wrong range, wrong lead.
	4/BM	40	Miss	Wrong range, wrong lead.
	5/BM	52	Hit	
	6/BSA	38	Miss	Wrong sensing, wrong adjustment.
	7/BSA	29	Miss	Wrong adjustment.
	8/BSA	47	Hit	
5	1/NBM	25	Hit	
	2/BM	34	Miss	Wrong range, wrong lead.
	3/BM	43	Hit	
	4/BSA	64	Hit	
	5/BSA	67	Hit	



Information Mapping, Inc.
First in Information Organization

June, 1983

Project No. 162

A JOB AID FOR EVALUATING LESSON PLANS

Prepared for:

U.S. Army
Training Developments Institute

By:

Information Mapping, Inc.

NOTICE
This manual has been developed using the standards of the Information Mapping® writing service. Information Mapping is a registered trademark of Information Mapping, Inc. of Lexington, Massachusetts.

1050 Waltham Street, Lexington, MA 02173 (617) 861-1730

This manual was originally researched and written by Donald M. Kristiansen and Bobby G. Witmer for the U.S. Army Research Institute for Behavioral and Social Sciences, Fort Knox Field Unit, Steel Hall, Fort Knox, KY, 40121.

TABLE OF CONTENTS

- Introduction..... iii

Section One--General Information

- Overview..... 1-1
- The Evaluation Questions..... 1-2

Section Two: Evaluating the Training Objectives

- Overview..... 2-1
- Question 1: Is the Training Objective Specific and Performance Oriented?..... 2-3
- Question 2: Is it a Training Objective and Not a Job Requirement?..... 2-4
- Question 3: Are the Conditions for a Task Specified?..... 2-5
- Question 4: Are Standards Listed in the Training Objective?..... 2-6
- Question 5: Are the Standards Clearly Spelled Out?..... 2-7
- Question 6: Is the Standard a Judgement Call?..... 2-8

Section Three: Evaluating the Training Process

- Overview..... 3-1
- Question 7: Is the Required Information Taught Through a Lecture or Hand-Out?..... 3-2
- Question 8: Is the Task Completely Demonstrated?..... 3-3
- Question 9: Is Each Subtask Demonstrated?..... 3-4
- Question 10: Is Hands-On Practice Required?..... 3-5
- Question 11: Is the Subtask or Task Practiced One or More Times to Standard?..... 3-6
- Question 12: Is an Assistant Instructor Guided by a Lesson Plan During a Soldier's Practice?..... 3-7
- Question 13: Are There Enough Assistant Instructors to Conduct Practice?..... 3-8

Continued on next page

TABLE OF CONTENTS, Continued

Section Four: Evaluating Testing

- Overview..... 4-1
- Question 14: Are the Items to be Tested Taken Directly from the Training Objectives?..... 4-3
- Question 15: Are All Critical or Difficult Tasks or Subtasks Tested?..... 4-3
- Question 16: Are the Conditions the Same for Training and Testing?..... 4-4
- Question 17: Are the Standards the Same for the Test?..... 4-4
- Question 18: Are the Test Instructions Precisely Written?..... 4-5
- Question 19: Does the Examiner Have Test Instructions to Read to Soldiers?..... 4-5
- Question 20: Are Scoring Instructions Specific Enough?..... 4-6
- Question 21: Does the Test Allow for Feedback on an Unacceptable Performance?..... 4-7

NOTICE

This manual has been developed using the standards of the Information Mapping® writing service. Information Mapping is a registered trademark of Information Mapping, Inc. of Lexington, Massachusetts.

A JOB AID FOR EVALUATING LESSON PLANS

INTRODUCTION

The training design

The training developer is responsible for designing a training program. A good design often means good training. A poor design usually means that the training will not be up to acceptable standards.

Evaluating the lesson plan

The lesson plan written by the training developer reflects the design. It indicates how the training will be carried out. Evaluating the lesson plan can provide an opportunity to conduct a preliminary "paper evaluation" of the training.

The lesson plan evaluation should be done before going out to actually observe the training in the classroom or the field. The lesson plan evaluation can help pinpoint areas that might later need additional evaluation. These areas include the training objectives, training process and testing.

The evaluation questions

This job aid contains a series of questions that have been developed to help the training analyst evaluate the lesson plan.

The answers will tell you

- how complete the lesson plan is
- how clear the lesson plan is
- what needs to be changed, and
- what needs to be added.

Lesson Plan - Worksheet 1

The Lesson Plan - Worksheet 1 is used by Training Analysts and observers. Worksheet 1 is used to find out if the implementation of the training program followed the lesson plan.

Worksheet 1 needs to be filled out using this job aid.

For more general information, see A Job Aid For Observing Training.

Continued on next page

This job aid

This job aid contains the following sections on evaluating the Lesson Plan:

SECTION	PAGE
One: General Information	1-1
Two: Evaluating the Training Objectives	2-1
Three: Evaluating the Training Process	3-1
Four: Evaluating the Testing	4-1

SECTION ONE
GENERAL INFORMATION

OVERVIEW

Introduction

There are twenty-one specific evaluation questions in this job aid that can be answered with a "YES" or "NO."

The goal is to answer all the questions with a "YES".

A "NO" answer

If any question is answered "NO", you will need to recommend changes for either the

- training objectives
- training process and/or
- testing.

How to evaluate

There is a detailed explanation that follows each question. It will help explain and pinpoint any problems related to a "NO" answer. You will then be able to recommend any necessary changes.

Procedure for change

The correct procedure to follow when you find a "NO" answer to any question is to

- make note of the answer and your suggestions for changes, and
- refer the problem back to the training developer.

In this section

This section of the job aid covers the following topic:

SECTION ONE—GENERAL INFORMATION	PAGE
The Evaluation Questions	1-2

THE EVALUATION QUESTIONS

The evaluation questions

These are the twenty-one questions that will be used to evaluate lesson plans. Each of them is covered in greater detail in the following sections.

QUESTIONS	PAGE
SECTION TWO: EVALUATING THE TRAINING OBJECTIVES	
Overview	2-1
1. Is the training objective specific and performance oriented?	2-3
2. Is it a training objective and not a job requirement?	2-4
3. Are the conditions for a task specified?	2-5
4. Are the standards listed in the training objective?	2-6
5. Are the standards clearly spelled out?	2-7
6. Is the standard a judgment call?	2-8
SECTION THREE: EVALUATING THE TRAINING PROCESS	
Overview	3-1
7. Is the required information taught through a lecture or hand-out?	3-2
8. Is the task completely demonstrated?	3-3
9. Is each subtask demonstrated?	3-4
10. Is hands-on practice required?	3-5
11. Is each subtask or task practiced one or more times to standard?	3-6

Continued on next page

The evaluation questions (continued)

QUESTIONS	PAGE
12. Is an assistant instructor guided by a lesson plan during a soldier's practice?	3-7
13. Are there enough assistant instructors to conduct practice?	3-8
SECTION FOUR: EVALUATING THE TESTING	
Overview	4-1
14. Are the items to be tested taken directly from the training objectives?	4-3
15. Are all critical or difficult tasks or sub-tasks tested?	4-3
16. Are the conditions the same for training and testing?	4-4
17. Are the standards the same for the test?	4-4
18. Are the test instructions precisely written?	4-5
19. Does the examiner have test instructions to read to soldiers?	4-5
20. Are the scoring instructions specific enough?	4-6
21. Does the test allow for feedback on an unacceptable performance?	4-7

SECTION TWO
EVALUATING THE TRAINING OBJECTIVES

OVERVIEW

Introduction

Training objectives help the instructors and soldiers reach the goals of a training program.

The goals and objectives of a training program tell the instructor, soldier and evaluator

- what the steps in each task are
- under what conditions they must be performed, and
- what standards must be met for a successful performance.

Training objectives in general

Training objectives tell an instructor what a soldier is expected to learn.

The objectives need to be specific and performance oriented. The conditions and performance standards need to be clearly spelled out.

Training objectives must always indicate

- tasks and subtasks which a soldier must learn how to do
- conditions under which they are to be learned and performed
- standards which the soldier must meet when tested.

Why training objectives are important

Clearly written training objectives will provide the necessary definitions of

- what needs to be trained
- what conditions the soldier must be under
- what standards the soldier must reach.

Without clearly written training objectives, each soldier's performance could not be broken down into measurable and observable

- tasks and subtasks
- conditions, and
- standards for a GO or NO GO.

What follows

Use the following six questions to evaluate the training objectives in a lesson plan. The questions will help determine whether the training objectives are written clearly enough for an instructor to use in order to conduct a good training program.

Continued on next page

In this section

In this section of the job aid we cover questions 1 through 6.

SECTION TWO—EVALUATING THE TRAINING OBJECTIVES	PAGE
Question 1: Is the Training Specific and Performance Oriented?	2-3
Question 2: Is it a Training Objective and <u>not</u> a Job Requirement?	2-4
Question 3: Are the conditions for a task specified?	2-5
Question 4: Are the standards listed in the training objective?	2-6
Question 5: Are the standards clearly spelled out?	2-7
Question 6: Is the standard a judgment call?	2-8

QUESTION 1: IS THE TRAINING OBJECTIVE SPECIFIC AND PERFORMANCE ORIENTED?

Purpose of the question

The training objective is supposed to define what the training accomplishes. The related tasks should be written with an emphasis on action verbs that describe what the soldier should be able to do after training.

Examples of specific tasks

For example, soldiers can

- repair things when they are broken
- replace things when they do not work any more
- assemble things that have been taken apart
- name things when they are pointed to
- describe what to do when something goes wrong.

Avoid general terms

Avoid more general terms like the following which are not specific enough to adequately describe the task:

- hit targets
- be oriented
- to become familiar with
- take appropriate action.

Unclear definitions cause problems

The problems resulting from inadequately defined tasks are as follows:

- tasks become defined by instructors from their own experience
- instructors develop their own styles and create their own training programs
- training becomes instructor-dependent and changes with each new instructor.

QUESTION 2: IS IT A TRAINING OBJECTIVE AND NOT A JOB REQUIREMENT?

Purpose of the question	There are important differences between a job requirement and a training objective. You need to be able to know one from the other in order to find and evaluate the training objectives.
How they are different	A training objective is not always performed • to the necessary level of skill • under the exact conditions that would be faced in a real job • to the same standards that would be required on the job. The training objective usually specifies a task, condition and standard that are obtainable in the training environment.
Example of training objective	The training objective for a soldier is to completely decontaminate a piece of equipment (task and standard) following a chemical or biological attack (condition). Since the real conditions will not be allowed in a training environment, the soldier performs the task under simulated conditions or through a verbal description of how the situation would be handled.
Example of a job requirement	The job requirement for this task would be to decontaminate a piece of equipment following a chemical or biological attack under real conditions and to rigid standards.
Simulated vs. real behavior	Instructor and soldier behavior is the most important difference between a training objective and a job requirement. In a job requirement performed during training, there is a greater sense of • urgency • stress • attention to soldier performance, and • adherence to standards. If conditions are simulated to meet a training objective, the instructor will sometimes allow a slightly substandard performance by a soldier.

QUESTION 3: ARE THE CONDITIONS FOR A TASK SPECIFIED?

Purpose of the question	Soldiers must be subject to certain training conditions in order to properly learn a task. These conditions must be listed in the lesson plan in order to make sure that each soldier is properly trained.
Conditions for a task	The conditions must contain a compete list of one or more of the following: • environmental conditions (such as location, time of day, etc.) • tools • job aids (such as handouts, etc.) or • any other additional equipment or information.
Example of a condition	If the condition listed is darkness, then the soldier must perform the task when it is dark.
When conditions differ	The training conditions will many times be different from the actual conditions a soldier would face on a job. Certain conditions cannot be used for training a task so the soldier must perform under mock conditions. The conditions must still be specified in order for the performance to be evaluated.
Example of mock conditions	Soldiers cannot perform tasks under NBC conditions because nuclear and biological agents cannot be used in a training environment. Soldiers may be able to perform the tasks under certain chemical conditions, but these conditions should still be specified in the lesson plan.

QUESTION 4: ARE STANDARDS LISTED IN THE TRAINING OBJECTIVE?

Purpose of the question	There are certain standards each soldier must meet in order to correctly perform a task. These standards need to be listed in the lesson plan in order for the instructor to give a soldier a GO for performing a task.
Standards for a task	The standards must be listed in terms of time and/or accuracy. A standard must also be observable and measurable.
Example of a standard	If a soldier must repair something, the standards will be • how long it takes to repair, and • how well it works when repaired.

QUESTION 5: ARE THE STANDARDS CLEARLY SPELLED OUT?

Purpose of the question

The standards must be clearly spelled out so that the soldier, instructor, examiner, and a training evaluator can tell the difference between

- performance at or above standard, and
- performance below standard.

Each task must have clearly written standards. This is necessary because the standards for a soldier's performance must be understood and applied in the same manner by everyone, especially the

- soldier
- instructor and
- examiner.

If the standards are unclear, then it is harder to determine the differences between a GO and a NO GO performance.

Unclear standards cause problems

When standards are written in an unclear manner, it increases the chance that those standards will be

- applied differently by each examiner, and
- misunderstood by instructors and examiners.

QUESTION 6: IS THE STANDARD A JUDGMENT CALL?

Purpose of the question

There are times when instructors or examiners will make a judgment call on a soldier's performance using their own unwritten standards.

In order to be consistent, all individual rules for an acceptable task performance should be written down and called the standard. Judgment calls that are not written down as the standard are not acceptable for evaluating a soldier's performance.

When it usually happens

Judgment calls are most likely to happen in the following training areas:

- Strategy
- Tactics
- Leadership.

It is important to make sure that the training standards for performance in any of these areas have been clearly written down.

SECTION THREE
EVALUATING THE TRAINING PROCESS

OVERVIEW

Introduction

A lesson plan must have clearly defined steps for a soldier to follow in order to learn a task.

The lesson plan usually includes the following for each task:

- a discussion or lecture
- demonstration of the task and subtasks
- practice of the task and subtasks under specified conditions
- guidance for instructors telling them what ACTIONS to look for during a practice session.

Important

The soldier will only be able to develop a skilled performance when the lesson plan includes all the necessary steps for learning a task.

What follows

Use the following seven questions to evaluate the training process in a lesson plan. These quesions will help determine if all the necessary steps for training have been included.

In this section

In this section of the job aid we cover questions 7 through 13.

SECTION THREE: EVALUATING THE TRAINING PROCESS	PAGE
Question 7: Is the required information taught through a lecture or hand-out?	3-2
Question 8: Is the task completely demonstrated?	3-3
Question 9: Is each subtask demonstrated?	3-4
Question 10: Is hands-on practice required?	3-5
Question 11: Is each subtask or task practiced one or more times to standard?	3-6
Question 12: Is an assistant instructor guided by a lesson plan during a soldier's practice?	3-7
Question 13: Are there enough assistant instructors to conduct practice?	3-8

QUESTION 7: IS THE REQUIRED INFORMATION TAUGHT THROUGH A LECTURE OR HAND-OUT?

Purpose of the question	In order to perform a task, a soldier should learn all the terms, concepts and other subject matter related to the task. All required information should be listed in the lesson plan.
Types of information	Here is a list of the terms, concepts and other information that needs to be included in the lesson plan: • the names or labels for things • the explanation of the working relationships of parts • the required readings on gauges and dials • any rules and strategies • the explanation of underlying concepts • the introduction of any other related subject matter.
Presenting the information	The information should be presented in a • lecture • handout, or • lecture and hand-out.

QUESTION 8: IS THE TASK COMPLETELY DEMONSTRATED?

Purpose of the question	It is important that each task is completely demonstrated by a skilled instructor in order for it to be correctly learned. The lesson plan should therefore provide an outline showing how to demonstrate the task.
Conducting a good demonstration	The outline should indicate that the task must be demonstrated • by an instructor • on actual equipment (or a realistic mock-up) • in full view of the soldiers being trained, and • with the soldiers allowed to stop the instructor to ask questions.
Other demonstration methods	Films, slides or other practical methods are usually less effective in the demonstration of tasks. They should be used when time and resources do not permit a live demonstration.

QUESTION 9: IS EACH SUBTASK DEMONSTRATED?

Purpose of the question

In order for soldiers to be given adequate training on a task, the lesson plan should call for a demonstration of all subtasks. Subtasks are important parts of a whole task.

The subtasks should be demonstrated separately even though they are part of the whole task.

Subtasks should be demonstrated first and the whole task should be demonstrated second.

Definition

A subtask is any of the following:

- part of a task
- a step in a long task or sequence
- a particular set of actions that are too long or difficult to master in one practice session.

Demonstrating subtasks

The lesson plan should indicate that subtasks should be demonstrated in the same sequence in which they are presented in the whole task.

Example

A soldier must learn the whole task of operator maintenance of a machinegun.

This whole task has three subtasks:

- disassembling the machinegun
- cleaning the machinegun, and
- reassembling the machinegun.

Each subtask should be demonstrated by an instructor in the sequence the soldier will use for the operator maintenance of the machinegun.

The soldier will always disassemble the machinegun for cleaning, clean the gun, and then reassemble the machinegun.

QUESTION 10: IS HANDS-ON PRACTICE REQUIRED?

Purpose of the question	In order for a soldier to develop all the necessary skills to do a task and subtask, hands-on practice is essential. No matter how good the lectures, demonstrations, or walk-throughs are, soldiers will not learn to do tasks or subtasks unless practice is called for in the lesson plan.
How to practice each task	Each task and subtask should be practiced with each of the following: • a hands-on performance • equipment listed in the training objective and • an Instructor or Assistant Instructor supervising the training.

When to practice subtasks	Each subtask should be practiced prior to practicing the whole task.
	
	Remember: The practice of a subtask is necessary when it is
	
	• part of a task
	• a step in a long task sequence, or
	• a particular set of actions that are
	  • part of a task
	  • too long or difficult to master in one practice session.

Important practice requirements	It is important that the lesson plan indicate that each task and subtask be practiced under the training conditions and to the training standards.

QUESTION 11: IS EACH SUBTASK OR TASK PRACTICED ONE OR MORE TIMES TO STANDARD?

Purpose of the question	To become genuinely skillful, every task and subtask practiced by a soldier must be performed to standards listed in the training objective. Practice to standards is necessary for each task and subtask because if a soldier cannot perform to standard, then he has not learned to perform the subtask or task.
Acceptable performance level	Soldiers must meet the standards at least once in order to go on with training.
Certain tasks need more practice	Difficult or novel tasks or subtasks may require that the soldier practice more than once to standard to "lock it in." Indicate the number of repetitions needed in the lesson plan.

QUESTION 12: IS AN ASSISTANT INSTRUCTOR GUIDED BY A LESSON PLAN DURING A SOLDIER'S PRACTICE?

Purpose of the question

The lesson plan should provide guidance for assistant instructors that tells them

- what to look for during practice
- how to correct faulty performance, and
- how to decide whether a soldier is making progress.

Progress during practice is crucial. If a soldier is not making progress then the soldier is practicing at least some incorrect performance and the training may need correcting.

Guidance for instructor

The lesson plan should provide the assistant instructor with the following:

- a list of common problems that might occur with the tasks being practiced

  Note: The list should specify which aspects of the task are likely to cause those performance problems.

- directions for the instructor on how to make feedback on errors

  - immediately
  - specifically related to the actions performed, and
  - free of ridicule.

- specific additional exercises to correct a task's faulty performance.

QUESTION 13: ARE THERE ENOUGH ASSISTANT INSTRUCTORS TO CONDUCT PRACTICE?

Purpose of the question	The lesson plan should include a requirement for enough assistant instructors for practice sessions. This is necessary in order to properly observe a soldier on the practice of a task or a subtask. No soldier should practice without an assistant instructor present in order to provide the following: • any necessary demonstrations • feedback • observing practice to make sure it meets the specified standards.
Length of supervision	The lesson plan should specify that a soldier practice under supervision until • a task can be done without error and up to standards or • errors are recognized and corrected in order to meet standards.

SECTION 4
EVALUATING THE TESTING

OVERVIEW

Introduction

Examiners test soldiers to see if they have mastered the training objectives.

Instructions for examiners

The test examiner must have instructions for administering each test. The instructions should include the following:

- An outline on exactly how the test should be given to make sure it is given the same way each time.
- An explanation about the way the test will be conducted and scored that should be read or given to each soldier prior to testing.
- A careful description of a correct performance that helps the examiner
  - observe what correct performance is and
  - be able to score a soldier's performance as correct or incorrect.

What follows

Use the following eight questions to help you evaluate the testing plan and instruments in the lesson plan.

In this section

In this section of the job aid we cover questions 14 through 21.

SECTION FOUR: EVALUATING THE TESTING		PAGE
Question 14:	Are the items to be tested taken directly from the training objectives?	4-3
Question 15:	Are all critical or difficult tasks or subtasks tested?	4-3
Question 16:	Are the conditions the same for training and testing?	4-4
Question 17:	Are the standards the same for this test?	4-4

Continued on next page

In this section (continued)

SECTION FOUR: EVALUATING THE TESTING		PAGE
Question 18:	Are the test instructions precisely written?	4-5
Question 19:	Does the examiner have test instructions to read to soldiers?	4-5
Question 20:	Are the scoring instructions specific enough?	4-6
Question 21:	Does the test allow for feedback on an unacceptable performance?	4-7

QUESTION 14: ARE THE ITEMS TO BE TESTED TAKEN DIRECTLY FROM THE TRAINING OBJECTIVES?

Purpose of the question	In order to evaluate the training accurately, soldiers should be tested only on those tasks which are listed in the training objective.
Which tasks should be tested	All tasks and subtasks listed in the training objective should be tested at some point in the training.
Important	Soldiers must never be tested on tasks and subtasks that are not • listed in the training objective or • part of the actual training.

QUESTION 15: ARE ALL CRITICAL OR DIFFICULT TASKS OR SUBTASKS TESTED?

Purpose of the question	In order to make sure that every part of the training is learned, each soldier should be tested on all tasks or subtasks identified in the training objective. These tasks or subtasks include • critical decisions • difficult actions, and • critical discriminations. Remember: If a task or subtask is important enough to be singled out as a training objective, it is important enough to test.
Test for expertise	The ability to make critical decisions and perform difficult actions indicates how much expertise a soldier has acquired. The ability to perform critical discriminations shows whether a soldier knows • whether an action is/is not required and • which of the possible actions to take

QUESTION 16: ARE THE CONDITIONS THE SAME FOR TRAINING AND TESTING?

Purpose of the question	In order to accurately test a soldier's performance, the conditions specified in the training objective need to be the same conditions used for <u>both</u> training and testing. New conditions should not be added for testing purposes if they were not listed in the training objective.
Example	If training objectives require that a task be performed under the conditions of reduced visibility which could include fog, darkness and smoke, then the test condition must have the same required conditions.

QUESTION 17: ARE THE STANDARDS THE SAME FOR THE TEST?

Purpose of the question	In order to correctly test a soldier on a task, the test standards should be the same as the standards used in the training. These standards must be listed in the training objective.
Where to include test standards	Test standards should be specified in at least one of two places: • the instructions to the examiner <u>or</u> • the test score sheets.

QUESTION 18: ARE THE TEST INSTRUCTIONS PRECISELY WRITTEN?

Purpose of the question

In order to have the same test standards for everyone, the test instructions must be precisely written.

The test instructions

The lesson plan should clearly outline how the test is to be administered.

These test instructions should include the following:

- testing sequence
- placement of personnel and equipment, and
- test administration procedures.

QUESTION 19: DOES THE EXAMINER HAVE TEST INSTRUCTIONS TO READ TO SOLDIERS?

Purpose of the question

In order for a soldier to perform a task correctly, the lesson plan should include complete instructions to the soldier on how a test will be conducted and scored.

Test instructions should be clear and complete so examiners do not have to add instructions of their own.

What is included in the test instructions

The instructor should read the following six items from the test instructions for the soldiers:

- what the soldier will have to do
- what the soldier will see or hear in order to determine when to start the test
- what conditions the soldier will perform under
- what equipment/tools the soldier will have and can use
- how much time is allowed for each test
- what the standards are for a successful completion of a task.

QUESTION 20: ARE SCORING INSTRUCTIONS SPECIFIC ENOUGH?

Purpose of the question

Scoring instructions should be specific enough (at the step/subtask level) to ensure that correct performance is observable and understandable to both the examiner and the soldier.

In order to score a test correctly, the examiner must be able to see and measure what the soldier is doing or, when that is not possible, see and measure what the soldier has done.

In either case, the examiner must know specifically what to look for in order to score the performance.

What to score

The lesson plan should show you two different ways to score a task.

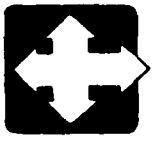
IF...	THEN score the...
the performance is most important	actions being performed.
the product is most important	final product only.

Instructions should be readable

Scoring instructions should be written clearly and simply so the examiner and soldiers can read them.

QUESTION 21: DOES THE TEST ALLOW FOR FEEDBACK ON AN UNACCEPTABLE PERFORMANCE?

Purpose of the question	It is not always clear to the soldier why a mistake is being made. They think they are doing it right, but they keep failing to meet the standard for performance. In order to help a soldier learn correct performance, it is sometimes necessary to • explain and/or demonstrate exactly what the soldier is doing incorrectly, then • specifically explain and/or demonstrate the correct performance.
Allow for feedback time	The test should allow time for this explanation or demonstration.



Information Mapping, Inc.
First in Information Organization

June, 1983

Project No. 162

A JOB AID FOR OBSERVING TRAINING

Prepared for:

U.S. Army
Training Developments Institute

By:

Information Mapping, Inc.

NOTICE
This manual has been developed using the standards of the Information Mapping® writing service. Information Mapping is a registered trademark of Information Mapping, Inc. of Lexington, Massachusetts.

1050 Waltham Street, Lexington, MA 02173 (617) 861-1730

This manual was originally researched and written by Donald M. Kristiansen and Bobby G. Witmer for the U.S. Army Research Institute for Behavioral and Social Sciences, Fort Knox Field Unit, Steel Hall, Fort Knox, KY, 40121.

A JOB AID FOR OBSERVING TRAINING — TABLE OF CONTENTS

A JOB AID FOR OBSERVING TRAINING

- Introduction..... iii

SECTION ONE -- GENERAL INFORMATION

- Overview..... 1-1
- General Guidelines for Observing Training..... 1-2

SECTION TWO -- THE TRAINING OBSERVATION WORKSHEETS

- Overview..... 2-1
- How to Complete Worksheet Headings..... 2-2
- Worksheet 1, Lesson Plan..... 2-4
- Worksheet 1, Lesson Plan--Part 1, Equipment and Materials..... 2-5
- Worksheet 1, Lesson Plan--Part 2, Training Objectives..... 2-7
- Worksheet 1, Lesson Plan--Part 3, Training Events..... 2-9
- Worksheet 2, Training Environment..... 2-13
- Worksheet 3, Training Observation..... 2-17
- Worksheet 4, Testing Observation..... 2-22

SECTION THREE -- TRAINING OBSERVATION WORKSHEET QUESTIONS

- Overview..... 3-1

PART 1--TRAINING ENVIRONMENT QUESTIONS

- Overview..... 3-1-1
- Questions 1 through 2: Number of Instructors..... 3-1-2
- Questions 3 through 7: Training Equipment..... 3-1-3
- Questions 8 through 15: Training Site..... 3-1-5
- Questions 16 through 22: Training Distractions..... 3-1-7
- Questions 23 through 25: Training Duration..... 3-1-9

Continued on following page

PART 2—TRAINING OBSERVATION QUESTIONS

- Overview..... 3-2-1
- Questions 26 through 32: Lecture Events--Training Objective. 3-2-2
- Questions 33 through 36: Lecture Events--Terminology..... 3-2-4
- Questions 37 through 42: Demonstration..... 3-2-5
- Questions 43 through 53: Practice..... 3-2-7
- Questions 54 through 58: Feedback..... 3-2-10
- Questions 59 through 61: Job Aids..... 3-2-12
- Questions 62: Training Events..... 3-2-13
- Questions 63 through 72: General Observations--Training Plan..... 3-2-14
- Questions 73 through 75: General Observations--Training Aids..... 3-2-17
- Questions 76 through 87: General Observations--Instructor Performance..... 3-2-19
- Questions 88 through 89: Training Duration..... 3-2-23

PART 3--TEST OBSERVATION QUESTIONS

- Questions 90 through 93: Test Instructions..... 3-3-2
- Questions 94 through 98: Matching Testing and Training.... 3-3-3
- Questions 99 through 102: Test Realism..... 3-3-4
- Questions 102 through 106: Testing Procedures..... 3-3-5
- Questions 107 through 109: Test Feedback..... 3-3-7

NOTICE
This manual has been developed using the standards of the Information Mapping® writing service. Information Mapping is a registered trademark of Information Mapping, Inc. of Lexington, Massachusetts.

A JOB AID
FOR OBSERVING TRAINING

INTRODUCTION

Why observation is important

Good training depends on the way that the training is conducted. Even if the instructor covers the subject completely, the soldiers can still fail if the training has been presented incorrectly.

To make sure that the approach to training is correct, the Army has set up standards that cover how training should be conducted. In order to make sure these standards have been met, the actual observation of training sessions in the field and classroom is necessary.

The Training Observer's job

The Training Observer uses a variety of forms and worksheets to check that the training standards are being met during training sessions. The Training Observer is the "eyes and ears" of the Training Analyst.

The Training Observer then turns this data over to a Training Analyst who reviews the results and recommends any necessary changes. Careful data gathering is critical to the evaluation and improvement of Army training programs.

How the job is done

The Training Observer's job mainly involves

- actively observing, and
- recording those observations.

Purpose of this job aid

This job aid is designed for use

- primarily by Training Observers on the job, or
- during training for teaching observers how to use the worksheets.

The job aid gives Training Observers step-by-step directions for observing and recording information on their training observation worksheets.

This job aid

This job aid contains the following general information about observing training:

SECTION	PAGE
One: General Information	1-1
Two: The Training Observation Worksheets	2-1
Three: The Training Observation Worksheet Questions	3-1

SECTION ONE
GENERAL INFORMATION

OVERVIEW

Test or workshops

A Training Observer may be scheduled to attend a workshop for training observers or to complete an observation test in order to become a fully qualified observer.

In this section

This Section of the job aid covers the following topic.

SECTION ONE—GENERAL INFORMATION	SEE PAGE
General Guidelines for Observing Training	1-2

GENERAL GUIDELINES FOR OBSERVING TRAINING

Introduction

Your recorded observations can lead to important and positive changes in the training program. You must make sure that your comments and observations are

- thorough
- accurate, and
- objective.

General rules to remember

Always follow these general rules when you record your observations.

1. Report only what you see and hear during training.
2. Be specific and objective. Do not report general impressions or your opinions about the training.
3. Be sure not to assist or interfere in the training or testing.
4. Consider each item on the worksheets individually.
5. Do not be misled into thinking there are no problems with the training simply because the instructor seems to be doing a good job.
6. Always record training problems when you find them.
7. Comment on the things that went well, so that a balanced report can go to training management.

Getting along with the instructor

You should not assist in, or interfere with, the training or testing in any way. At the same time, the instructor should not make it difficult for you to do your job. You must be allowed to get close enough to the training to make the necessary observations.

You should not try to change the way the instructor does his job, nor should the instructor try to change the way you do yours. Both of you have a job to do, and your jobs are equally important.

Evaluate the program

Your job is to make observations that will be used to evaluate only the training program. You are not evaluating the instructor.

Continued on next page

Procedure

Follow this general procedure whenever you observe training.

	DURING THE TRAINING
1	Observe and record activities on the training observation worksheets.
	AFTER THE TRAINING
2	Check the worksheets for completeness and accuracy.
3	Return the worksheets to the Training Analyst.

SECTION 2
THE TRAINING OBSERVATION WORKSHEETS

OVERVIEW

The Training Observation worksheets

The Training Observation Worksheets are designed to help you observe training and testing.

The questions on the worksheets tell you what to look for in a training program. In most cases, all you need to do is show whether the activity described on the worksheet actually did or did not happen.

Four worksheets

There are four Training Observation worksheets:

- Worksheet 1, Lesson Plan
- Worksheet 2, Training Environment
- Worksheet 3, Training Observation
- Worksheet 4, Testing Observation.

Worksheets are not always the same

As you observe different training programs, you will notice that the questions on the worksheets are not always the same. Some questions will be included for one type of training and not included for another.

The worksheets are developed by the Training Analyst who chooses questions that apply only to the specific training program that you are observing.

In this section

In Section Two of the job aid we discuss how to use the worksheets.

SECTION TWO—THE TRAINING OBSERVATION WORKSHEETS	SEE PAGE
How to Complete Worksheet Headings	2-2
Worksheet 1, Lesson Plan	2-4
Worksheet 1, Lesson Plan--Part 1, Equipment and Materials	2-5
Worksheet 1, Lesson Plan--Part 2, Training Objectives	2-7
Worksheet 1, Lesson Plan--Part 3, Training Events	2-9
Worksheet 2, Training Environment	2-13
Worksheet 3, Training Observation	2-17
Worksheet 4, Testing Observation	2-22

HOW TO COMPLETE WORKSHEET HEADINGS

Headings for worksheets

Each worksheet has a heading that you will need to fill out.

The heading identifies

- the name of the class
- when and where the training occurred, and
- who was present.

When to complete headings

You may find it helpful to complete some of the items in the heading before the class or test begins.

However, most of the items must be recorded when you actually observe them or when they occur. Remember, record what actually happens, not what is supposed to happen.

Sample heading

SAMPLE HEADING

Class/Lesson Title	①	Date	⑦
Training/Testing Site		Training Observer	⑧
	②	Instructor	⑨
Number of Soldiers	③	Examiner	⑩
Number of Instructors/AIs	④	Test/Retest	⑪
Class/Test Started (Time)	⑤		
Class/Test Ended (Time)	⑥		

Note: This is a sample. Not all of this information is in every heading.

Continued on next page

How to complete headings

Use this table to help you complete the numbered items from the sample heading.

NUMBER	RECORD THE...
①	name of the class or lesson you are observing.
②	name of the place <u>and</u> the type of place where the training or test is given. <u>Example</u>: Richardson Tank Motor Park, 103 Harris Hall--classroom
③	number of soldiers actually present for instruction or testing.
④	number of instructors present. Include Primary Instructors <u>and</u> Assistant Instructors (AIs).
⑤	exact time the instruction or test <u>actually</u> began.
⑥	exact time the class <u>actually</u> ended.
⑦	day, month and year.
⑧	name or ID number assigned to you.
⑨	name(s) or ID number(s) of the person who presents the instruction.
⑩	name(s) or ID number(s) of the person who conducts and perhaps scores the test.
⑪	**IF the soldiers...** / **THEN circle...** are being tested for the first time on the task / Test. got a NO GO on the first attempt and are being tested again / Retest.

WORKSHEET 1, LESSON PLAN

Introduction	For each class you observe, the Training Analyst will give you Worksheet 1, Lesson Plan which outlines what the instructor planned to do for that class. Use this worksheet to find out if the instructor followed the lesson plan.
Three parts	Worksheet 1, Lesson Plan has three parts: • Part 1, Equipment and Materials • Part 2, Training Objectives • Part 3, Training Events.
On the following pages	In this section of the job aid, we discuss the three parts of Worksheet 1, Lesson Plan, and give an example of each part.

WORKSHEET 1, LESSON PLAN—PART 1: EQUIPMENT AND MATERIALS

Description

Part 1 of the Lesson Plan Worksheet lists the

- equipment and materials that should be used during training
- job aids that should be given to the soldiers and used during training
- requirements for the training site, including site preparation
- safety precautions the instructor should emphasize during training.

Example

The example on the next page shows Part 1 of a lesson plan worksheet for a training session in operator maintenance of the Cal. 50 machinegun.

This is what the worksheet looks like when the Training Analyst gives it to you.

How to complete Part 1

Follow these instructions to complete Part 1.

STEP	PROCEDURE
1	Check off the following as they are introduced during the lesson: • equipment • materials • aids • safety precautions.
2	Make notes about safety violations or problems with the training site in the margins or on the back of the worksheet.

Continued on next page

Sample worksheet

WORKSHEET 1, LESSON PLAN - PART 1, EQUIPMENT AND MATERIALS

Class/Lesson Title Operator Maintenance on Cal. 50 M2 HB Machinegun

Training Observer (Your Name)

1. List under the appropriate heading below the training aids, equipment, and materials that will be used during this lesson.

Training Equipment	Training Materials	Training Aids
One .50 Cal Machinegun per student	TM 9-1005-213-10	
Headspace & Timing Gauge	Handout, "Machinegun M2, Cal .50 HB	
Five-round belt of dummy ammunition		

2. List any job aids that will be provided to soldiers and used during this training.

   None.

3. From the lesson plan, briefly describe the characteristics required of the training site. Include how the site should be prepared for training.

Training site should be a large classroom with tables for assembly/disassembly. Each Cal .50 M2 HB machinegun should be checked by AI before class to ensure it is operational. Machineguns and all associated equipment to include headspace and timing gauge, dummy ammunition and .50 cal link should be present.

4. List safety precautions that should be emphasized and followed during this training.

   (a) Ensure weapon is clear before starting disassembly.

   (b) Before removing backplate, ensure that recoiling parts are forward to prevent injury.

   (c) If headspace is set improperly or timing is early, the round may fire before fully seating in the chamber causing damage to parts or injury to personnel.

WORKSHEET 1, LESSON PLAN—PART 2, TRAINING OBJECTIVES

Description

Part 2 of the lesson plan worksheet lists the training objectives for the lesson by task and subtask. This part of Worksheet 1 is mainly used as a reference.

Each training objective listed in Part 2 will contain

- a task
- a condition or conditions, and
- the standards for a GO.

Training objective terms and meanings

TERM	WHAT IT MEANS
task	A description of what a soldier is supposed to do after training.
a condition or conditions	The condition(s) are • the things a soldier will be given to perform the task, and • the circumstances under which the soldier will perform the task. (Example: darkness; MOPP, etc.)
the standards for GO	The standards tell how quickly and accurately the soldier must perform the task in order to receive a GO.

How to use Part 2

Whenever an observation question on Worksheets 2 and/or 3 requires you to know the tasks, subtasks, conditions or standards for a particular training objective, Part 2 of this worksheet will provide the information.

Example

The example on the next page is Part 2 of the lesson plan worksheet for a training program in operator maintenance of the Cal .50 worksheet.

This is what the worksheet looks like when you receive it from the Training Analyst.

Continued on next page

Sample worksheet

WORKSHEET 1, LESSON PLAN - PART 2, TRAINING OBJECTIVES

Class/Lesson Title Operator Maintenance on Cal. 50 M2 HB Machinegun

TRAINING OBJECTIVES		
Task No.	Objective	Source
1	Task: Perform operator maintenance on a Cal .50 M2 HB machinegun.	Lesson Plan, Operator Maintenance on cal .50 M2 HB machinegun, May, 1981.
1A	Subtask: Clear the weapon in sequence following procedures on page 3 of the handout.	
1B	Subtask: Disassemble the Cal .50 M2 HB machinegun.	
1C	Subtask: Assemble the Cal .50 M2 HB machinegun and perform operational check.	
	Conditions: Provided with a Cal .50 M2 HB machinegun in a classroom with a table for assembly/disassembly.	
	Standards:	
	(1) Subtask 1A is performed correctly within 10 seconds.	
	(2) Subtask 1B is completed within 4 minutes.	
	(3) Subtask 1C is performed within 6 minutes.	
2	Task: Set and check headspace and timing on a Cal .50 M2 HB machinegun to ensure proper firing.	Same as above.
	Conditions: Provided with a Cal .50 M2 HB machinegun, headspace and timing gauge, and a Cal .50 ammunition link in a classroom.	
	Standards:	
	(1) Check and/or set headspace and timing on the Cal .50 M2 machinegun IAW procedures on page 37, paragraph 2, of TM 9-1005-213-10.	
	(2) Task must be completed within 5 minutes.	

WORKSHEET 1, LESSON PLAN—PART 3, TRAINING EVENTS

Description

Part 3 of the lesson plan worksheet lists the training events planned for the lesson.

Parts of the worksheet

The worksheet includes the following columns:

- the task number (from Part 2 of the worksheet)
- the event type
- a description of the event
- columns marked **YES** and **NO**, so you can check whether the event took place
- space for comments.

Event types and meanings

There are 5 event types listed in the second column on Part 3 of the worksheet.

EVENT TYPE	MEANING
OBJ	Objectives/Purpose: The instructor(s) should explain • each training objective including the tasks, conditions and standards, and • the purpose of the training.
TERM	Terminology: The instructor(s) should identify new terms and explain unfamiliar concepts.
DEMO	Demonstration: The instructor should show the soldiers how to perform the task.
PRAC	Practice: The soldiers should get hands-on practice.

TEST	• The soldiers should perform the task for testing purposes.
	• The instructor(s) or tester(s) should
	  • score performance, and
	  • record the scores.

Example 1

The example on the next page shows Part 3 of a lesson plan worksheet for a training session in operator maintenance of the Cal .50 machinegun.

This is what the worksheet looks like after you receive it from the Training Analyst.

Continued on next page

WORKSHEET 1, LESSON PLAN—PART 3, TRAINING EVENTS, Continued

Sample worksheet

WORKSHEET 1, LESSON PLAN - PART 3, TRAINING EVENTS

Class/Lesson Title Operator Maintenance on Cal. 50 M2 HB Machinegun

TRAINING EVENTS					
Task No.	Event Type	Events	Occur? Yes	Occur? No	Comments
1	OBJ	Instructor states training objective (see Part 2).			
1	TERM	Instructor shows .50 cal to the soldiers and labels each part listed below. 1. Butterfly Trigger Safety 2. Barrel 3. Cover Group 4. Charger Handle 5. Barrel Locking Spring Lug 6. Receiver 7. Barrel Extension Group 8. Extension Spring 9. Backplate Assembly 10. Driving Spring Rod Assembly 11. Bolt 12. Bolt Stud 13. Barrel Buffer Body Group 14. Barrel Buffer Assembly 15. Retaining Pin			(Note: TERM may be given during DEMO.)
1	TERM	Instructor identifies the following: 1. Ammunition Belt 2. Extractor 3. Ammunition Box			
1A	DEMO	Clear the Cal .50 machinegun.			
1A	PRAC	Clear the Cal .50 machinegun.			
1B	DEMO	Disassemble the Cal .50 machinegun.			
1B	PRAC	Disassemble Cal .50.			

Continued on next page

How to complete Part 3

Follow these instructions to complete Part 3.

STEP	PROCEDURE
1	Show whether the event took place by checking **YES** or **NO** in the column provided.
2	Write down a comment if an event • did not take place--and you want to say more • took place but not for the event listed • took place, but not in the correct order • took place, but was different in some way from the description.

Example 2

The example on the next page shows Part 3 of the worksheet after the Training Observer fills it out.

Continued on next page

WORKSHEET 1, LESSON PLAN - PART 3, TRAINING EVENTS

Class/Lesson Title Operator Maintenance on Cal. 50 M2 HB Machinegun

TRAINING EVENTS					
Task No.	Event Type	Events	Occur? Yes	Occur? No	Comments
1	OBJ	Instructor states training objective (see Part 2).	✓		
1	TERM	Instructor shows cal .50 to the soldiers and labels each part listed below.	✓		(Note: TERM may be given during DEMO.)
		1. Butterfly Trigger Safety	✓		
		2. Barrel	✓		
		3. Cover Group		✓	Order was reversed
		4. Charger Handle		✓	
		5. Barrel Locking Spring Lug	✓		
		6. Receiver	✓		
		7. Barrel Extension Group	✓		
		8. Extension Spring	✓		
		9. Backplate Assembly	✓		
		10. Driving Spring Road Assembly	✓		
		11. Bolt	✓		
		12. Bolt Stud	✓		
		13. Barrel Buffer Body Group	✓		
		14. Barrel Buffer Assembly	✓		
		15. Retaining Pin	✓		
1	TERM	Instructor identifies the following:			
		1. Ammunition Belt	✓		
		2. Extractor	✓		
		3. Ammunition Box		✓	Not identified.
1A	DEMO	Clear the cal .50 machinegun.	✓		
1A	PRAC	Clear the cal .50 machinegun.	✓		
1B	DEMO	Disassemble the cal .50 machinegun.	✓		
1B	PRAC	Disassemble cal .50 machinegun.		✓	4 minute standard not followed for all soldiers.

WORKSHEET 2, TRAINING ENVIRONMENT

Description	Worksheet 2, Training Environment, contains questions about the location in which the training is given. The questions ask about features of the training site that are likely to influence how well the soldiers are trained and which resources are used.
Parts of the worksheet	The worksheet includes the following parts: • the list of questions • columns marked **YES**, **NO** and **NA** (not applicable) • column for **COMMENTS**.
Example 1	The example on the next page shows how the first page of a training environment worksheet might look after you receive it from the Training Analyst.

Continued on next page

Sample worksheet

WORKSHEET 2, TRAINING ENVIRONMENT

Class/Lesson Title _____

Training Site _____

Number of Soldiers _____ Date _____

Number of Instructors/AI's _____ Training Observer _____

ENVIRONMENTAL FACTORS	YES	NO	NA	COMMENTS
1. Were enough instructors present to provide adequate supervision and assistance?				
3. Was the training equipment specified in the lesson plan used in the training?				
4. Was there enough training equipment to go around?				
5. Did the training equipment work properly?				
6. Was the equipment necessary for the training readily available when needed?				
7. Did each soldier receive a copy of handouts or other materials used?				

Additional Comments: _____

Continued on next page

How to fill out the worksheet

Follow these instructions to complete Worksheet 2.

STEP	PROCEDURE
1	Read each question carefully.
2	Answer the questions by putting a check in the column marked **YES, NO** or **NA.** Note: If the question does not apply to the training you are observing, check **NA** for not applicable.

When to comment

It is also sometimes necessary to add a move detailed observation to your **YES** or **NO** response.

Use the **COMMENT** column when

- the training site is different from the description of the site in the lesson plan
- the way the training site is set-up affects how well the soldiers are trained, OR
- the training resources listed in the lesson plan were not used properly or were not used at all.

For help with the questions

If you don't understand a question or need help answering one, you can look it up in Section 3 in this Job Aid.

Example

The example on the next page shows worksheet 2 after the Training Observer fills it out.

Continued on next page

Sample worksheet

WORKSHEET 2, TRAINING ENVIRONMENT

Class/Lesson Title Operator Maintenance of the Cal .50 machinegun

Training Site Johnson Firing Range

Number of Soldiers 10 Date March 7, 1983

Number of Instructors/AI's 2 Training Observer Sgt. P. Jones

ENVIRONMENTAL FACTORS	YES	NO	NA	COMMENTS
1. Were enough instructors present to provide adequate supervision and assistance?	✓			
3. Was the training equipment specified in the lesson plan used in the training?	✓			
4. Was there enough training equipment to go around?	✓			
5. Did the training equipment work properly?		✓		2 machines were not in working condition.
6. Was the equipment necessary for the training readily available when needed?	✓			
7. Did each soldier receive a copy of handouts or other materials used?	✓			

Additional Comments:

WORKSHEET 3, TRAINING OBSERVATION

Description

Worksheet 3, Training Observation, contains questions about how the training is given.

Parts of the worksheet

The worksheet contains the following three separate Parts:

PART	DESCRIPTION
1. Lecture/Conference	This part contains questions about the lecture portion of the training.
2. Demonstration and Practice	These questions concern • demonstration • practice activities • feedback (what soldiers are told about their performance) • use of job aids.
3. General Observations	These questions are about • how the activities described in the lesson plan are carried out • how well the instructor conducts the training • what training aids are used • how long the training session was.

When to fill out Worksheet 3

Each part of the worksheet needs to be filled out at a specific time.

- Fill out Part 1 during the lecture portion of the class.
- Fill out Part 2 during demonstration and practice.

  Note: Be aware that lectures and demonstrations may occur together during "walk-throughs" or "talk-throughs."

- Part 3 can be completed any time during the training or at the end of the lesson.

Continued on next page

How to fill out Worksheet 3

Follow these instructions to complete Worksheet 3.

STEP	PROCEDURE
1	Read each question carefully.
2	Answer the question by putting a check in the columns marked **YES, NO** and **NA** (not applicable) Note: If you do not have enough information to answer a question, write "UNKNOWN" in the **COMMENTS** column.
3	You must comment when there appears to be a training problem. You may comment on any question that you have answered. Important: When your worksheet indicates a problem, the Training Analyst must know exactly what it is.

For help with the questions

If you cannot understand a question, or need help answering it, you can look it up in Section 3 in this job aid.

Example

The three pages that follow show how the 3 parts of a training observation worksheet must look after you receive it from the Training Analyst.

Continued on next page

Sample worksheet

WORKSHEET 3, TRAINING OBSERVATION - PART 1 LECTURE/CONFERENCE

Class/Lesson Title _____

Class Started (Time) _____

Class Ended (Time) _____

OBSERVATIONS	YES	NO	NA	COMMENTS
27. Were soldiers told the training objectives including tasks, conditions, and standards?				
29. Were soldiers told how this task fits in with their eventual job duties?				
30. Were soldiers told how this training fits in with previous and future training?				
32. Did the soldiers have a training schedule available to them?				
33. Did the instructor question the soldiers about what they were already supposed to know?				
34. Did the instructor tell the soldiers how the equipment worked and label the parts?				

Additional Comments: _____

Continued on next page

Sample worksheet

WORKSHEET 3, TRAINING OBSERVATION - PART 2 LECTURE/CONFERENCE

Class/Lesson Title _____

OBSERVATIONS	YES	NO	NA	COMMENTS
37. Were the tasks demonstrated by the instructor?				
38. Was each subtask demonstrated?				
39. Were demonstrations conducted on equipment listed in the lesson plan?				
40. Could demonstrations be seen and heard by all soldiers?				
43. Did all soldiers practice?				
44. Were soldiers initially allowed to practice subtasks in isolation from one another?				
45. Was the practice on each subtask hands-on using the equipment listed in the lesson plan?				

Additional Comments: _____

Continued on next page

Sample worksheet

WORKSHEET 3, TRAINING OBSERVATION - PART 3 LECTURE/CONFERENCE

Class/Lesson Title _____

OBSERVATIONS	YES	NO	NA	COMMENTS
63. Did the instructor follow the lesson plan?				
64. Were audiovisual materials, handouts, manuals or other training aids called for in the lesson plan actually used?				
66. Was the instructor's presentation well organized?				
70. Were soldiers sometimes standing around with nothing to do during training?				
73. Did the instructor use the training aids effectively?				
86. Did the instructor use class time efficiently?				

Additional Comments: _____

WORKSHEET 4, TESTING OBSERVATION

Description

Worksheet 4, Testing Observation Worksheet, contains questions about the way the testing is written and administered.

The questions primarily examine the training process as it relates to testing. The questions measure how effective the tests and testing procedures have been.

This worksheet also looks at the level of on-the-job skills and knowledge that the soldiers have achieved.

How to fill out Worksheet 4

Follow these instructions to complete Worksheet 4.

STEP	PROCEDURE
1	Fill out the worksheet while the test is being given.
2	Read each question carefully.
3	Answer the question by putting a check in columns marked **YES**, **NO** or **NA**. Note: If you do not have enough information to answer a question, write "UNKNOWN" in the **COMMENTS** space.
4	Comment whenever your answer indicates a problem • with the test, or • how it is given. Note: You may comment on any question, no matter how you answered it.

For help with the questions

If you don't understand a question or need help answering it, you can look it up in Section 3 of this job aid.

Example

The example on the next page shows how the first page of a Testing Observation Worksheet might look when the Training Analyst gives it to you.

Continued on next page

WORKSHEET 4, TESTING OBSERVATION, Continued

Sample worksheet

WORKSHEET 4, TESTING OBSERVATION

Class/Lesson Title _____ Date _____

Testing Site _____ Examiner _____

Test Started (Time) _____ Test/Retest _____

Test Ended (Time) _____

OBSERVATIONS	YES	NO	NA	COMMENTS
90. Did the examiner read the test instructions directly from the lesson plan?				
91. Were pass/fail standards provided to the soldiers?				
94. Did the test occur soon after the completion of training?				
95. Were all tasks specified in the training objectives tested?				
98. Were the standards specified in the training objectives used to score test performance?				
103. Did the same person act as both examiner and instructor?				

Additional Comments: _____

SECTION 3
THE TRAINING OBSERVATION WORKSHEET QUESTIONS

OVERVIEW

Purpose

The questions on the training observation worksheets are chosen by the Training Analyst. The questions have been designed to help evaluate a training program in three areas:

- Training Environment (Worksheet 2)
- Training Observation (Worksheet 3), and
- Testing Observations (Worksheet 4).

The questions

The Training Analyst will choose from a total of 109 questions to help evaluate the specific training you are observing. If you observe training more than once, you will notice that the same questions may not always be used.

Some questions will be included for one type of training and not included for another.

In this section

In Section Three of the job aid, we discuss the following worksheets:

SECTION THREE—EXPLANATIONS OF THE TRAINING OBSERVATION WORKSHEET QUESTIONS	PAGE
Part 1--Training Environment Questions	3-1-1
Part 2--Training Observation Questions	3-2-1
Part 3--Testing Observation Questions	3-3-1

PART 1
TRAINING ENVIRONMENT QUESTIONS

OVERVIEW

Introduction

This part of Section three contains a detailed explanation of the questions that may appear on Worksheet 2, Training Environment.

Where to look

You can look up information about specific questions on the following pages.

QUESTIONS	TOPIC	PAGE
1 & 2	Number of Instructors	3-1-2
3-7	Training Equipment	3-1-3
8-15	Training Site	3-1-5
16-22	Training Distractions	3-1-7
23-25	Training Duration	3-1-9

Note

Every question on the worksheet should have a check (✓) or an **NA**
(Not Applicable) in one of the following columns:

- **YES**
- **NO**

If a comment is asked for, add the appropriate remarks and observations in the column for **COMMENTS.** If you need more information, write **UNKNOWN** in this column.

QUESTIONS 1 AND 2: NUMBER OF INSTRUCTORS

Background

The number of instructors needed for training depends on

- the number of soldiers being trained
- the type of training, and
- the amount of time allowed for training.

Example: One instructor may be able to lecture to a large group of soldiers and answer questions.

More instructors may be needed for tasks that can only be demonstrated to a few soldiers at a time.

Question 1

Question 1: Were enough instructors present to provide adequate supervision and assistance?

Check **NO** if you see

- soldiers practicing without instructor supervision
- too many soldiers crowding around an instructor
- several soldiers trying to get help from the same instructor at one time.

Question 2

Question 2: Did you see soldiers wanting an instructor, but none were available?

Check **YES** if you see

- soldiers raising their hands or trying to get an instructor's attention and not getting it
- several soldiers waiting for help.

QUESTIONS 3 THROUGH 7: TRAINING EQUIPMENT

Definition: training equipment

Training equipment is all the things the soldier needs to learn a task or to practice with.

Question 3

Question 3: Was the training equipment specified in the lesson plan used in the training?

Check **NO** and **COMMENT** if

- the equipment was not used, and/or
- other equipment was substituted.

See Worksheet 1, Lesson Plan to find out what training equipment was specifically listed.

Question 4

Question 4: Was there enough equipment to go around?

Check **NO** if

- soldiers had to share equipment, and
- sharing equipment made the training less efficient.

Question 5

Question 5: Did the training equipment work properly?

Check **NO** if

- you observe the equipment is not working properly based on your knowledge of how it is supposed to work
- the instructor says that the equipment is not working and simulates the training with that equipment
- the instructor calls someone to repair the equipment or postpones training because of equipment failure
- soldiers complain about the equipment
- soldiers have problems doing a task, even though they appear to be doing it the correct way.

Continued on next page

Question 6	**Question 6: Was the equipment necessary for training readily available when needed?** Check **NO** if training was interrupted to find a needed piece of equipment.
Question 7	**Question 7: Did each soldier receive a copy of handouts or other materials needed?** Check **NO** if you see soldiers sharing materials.

QUESTIONS 8 THROUGH 15: TRAINING SITE

Definition: training site

The **training site** is the actual physical place where the training is given.

Question 8

Question 8: Could all soldiers see and hear the instruction?

Check **NO** if you see soldiers

- positioned where they cannot see
- straining to get a better view
- cupping their hands behind their ears
- asking the instructor to repeat things.

Question 9

Question 9: Did the soldiers have enough elbow room?

Check **NO** if

- the training site is too small for the number of soldiers
- soldiers are cramped for space
- soldiers did not have enough room to practice tasks or to take notes.

Question 10

Question 10: Did the physical layout of the training environment make seeing demonstrations or audiovisuals difficult?

Check **NO** only if everyone could see the demonstrations or audiovisuals.

Check **YES** and **COMMENT** if the soldiers could not see because the site was poorly chosen or because it was poorly arranged.

Question 11

Question 11: Was the training site so noisy that you had trouble hearing the instructor?

Check **NO** if you had no trouble hearing the instructor.

Check **YES** and **COMMENT** on what was making the noise if you could not hear.

Continued on next page

Question 12

Question 12: Did the noise in the training area distract soldiers and make hearing the instructor difficult?

Check **NO** if the noise in the training area did not distract the soldiers.

Check **YES** and **COMMENT** if noise

- diverted the soldiers' attention
- caused the instructor to repeat information
- caused soldiers to draw closer to the instructor
- caused soldiers to cup their hands over their ears in order to hear the instructor.

Question 13

Question 13: Is this a poor training site from the point of view of noise distraction?

Check **NO** if there were no problems with distracting noise.

Check **YES** and **COMMENT** if the site was

- noisy during much of the training, and
- is likely to remain that way because the site is usually noisy.

Question 14

Question 14: Was there enough light for you to see what was going on?

Check **NO** if you cannot see clearly what is going on. This includes demonstrations and soldier performance.

Question 15

Question 15: Was there enough light for the soldiers to see what was going on?

Check **NO** if the soldiers

- complain about it being dark, or
- indicate that they're having trouble seeing by squinting, or
- drawing closer to what they are trying to see.

QUESTIONS 16 THROUGH 22: TRAINING DISTRACTIONS

Definition: training distractions

Training distractions include anything that makes it difficult for soldiers to pay attention and concentrate on the training.

Question 16

Question 16: Were there observers at the training site other than yourself?

Check **NO** if there were no other observers at the training site.

Check **YES** and **COMMENT** if there were other observers. Be specific. For example, were they military or civilian, officers or enlisted personnel.

Question 17

Question 17: Were soldiers distracted by the presence of civilian observers or high ranking officers?

Check **NO** if soldiers were not distracted by outside observers.

Check **YES** and **COMMENT** if soldiers seemed distracted and were

- looking over their shoulders, or
- suddenly performing poorly when a high ranking officer or civilian appeared.

Question 18

Question 18: Was training interrupted at any time?

Check **NO** if training was not interrupted.

Check **YES** and **COMMENT** if the training was interrupted by indicating

- what the interruption was and
- how long it lasted.

Examples:
- Instructor or soldiers leave before class is over
- Equipment breaks down
- Delays due to weather
- Delays due to missing equipment

Continued on next page

Question 19

Question 19: Was any training left out as the result of an interruption?

Check **NO** if interruption(s) did not cause the planned training to be changed or shortened.

Check **YES** if the training was changed because of the interruption. **COMMENT** on what the change was or what was left out.

Note: This question requires careful observation. When you see that considerable training time is being lost due to interruptions, watch training closely to see if there are any changes.

Question 20

Question 20: Did the soldiers complain about the weather during training?

Check **NO** if you hear no one complain about being uncomfortable due to weather.

Check **YES** and **COMMENT** on how many soldiers complained if it was more than one.

Question 21

Question 21: Were the weather conditions so uncomfortable that soldiers were distracted from training?

Check **NO** if the weather did not distract soldiers from training.

Check **YES** and **COMMENT** if

- the soldiers are shivering or sweating a lot, or
- wind and rain cause soldiers to crouch or stand so it is difficult for them to watch the instructor or perform tasks.

Question 22

Question 22: Were weather conditions at the training site so bad that training was seriously affected?

Check **NO** if the weather conditions did not seriously affect training.

Check **YES** and **COMMENT** if

- the weather obviously affects both instructor and soldier performance, or
- training is stopped or postponed until weather conditions improve.

Note: Explain what the weather problem was and how it affected training.

QUESTIONS 23 THROUGH 25: TRAINING DURATION

Definition

Training duration refers to

- how long the full training session lasted, or
- how much time an individual training event took.

Question 23

Question 23: Did the instructor(s) cover all the training events in the allotted time?

Check **NO** if the instructor did not cover all of the training events planned in the allotted time. See Worksheet 1, Lesson Plan, to find out how much time is allotted for each training event.

COMMENT on how much more time was used and on any training events that were left out.

Question 24

Question 24: Was training so long that soldiers became bored or so short that instructors were cutting instructor time?

Check **NO** if soldiers were not bored or instruction time was not cut.

Check **YES** and **COMMENT** if

- the session was long and the type of activity the soldier was involved in did not change
- breaks were not frequent enough
- soldiers did not have enough practice time
- the instructor reduced the amount of training given.

Always **COMMENT** when training sessions seem much too long or too short.

Question 25

Question 25: Was the allotted training time too short or too long for the training objectives?

Check **NO** if the training objectives were adequately covered.

Check **YES** and **COMMENT** if

- all soldiers did not have enough time to perform, unassisted at least one time to standard and without help, the tasks listed in the training objectives (See Worksheet 1, Lesson Plan), or
- all soldiers meet all training objectives with more than one quarter of the allotted class time left over.

PART 2
TRAINING OBSERVATION QUESTIONS

OVERVIEW

Introduction

This part of Section three contains a detailed explanation of the questions that may appear on Worksheet 3, Training Observation.

Where to look

You can look up information about specific questions on the following pages.

QUESTIONS	TOPIC	SEE PAGE
26-32	Lecture Events--Training Objectives	3-2-2
33-36	Lecture Events--Terminology	3-2-4
37-42	Demonstrations	3-2-5
43-53	Practice	3-2-7
54-58	Feedback	3-2-10
59-61	Job Aids	3-2-12
62	Training Events	3-2-13
63-72	General Observations--Training Plan	3-2-14
73-75	General Observations--Training Aids	3-2-17
76-87	General Observations--Instructor Performance	3-2-19
88-89	General Observations--Training Duration	3-2-23

Note

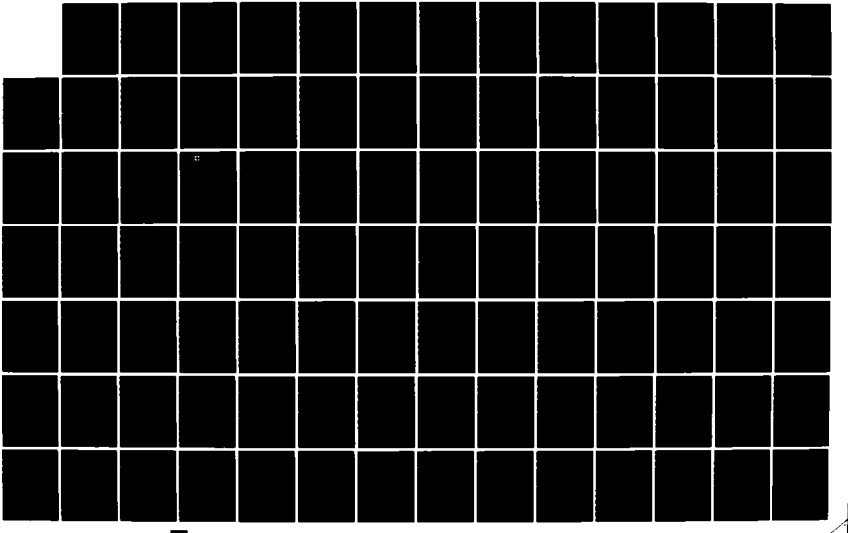
Every question on the worksheet should have a check (✓) or an **NA** (Not Applicable) in one of the following columns:

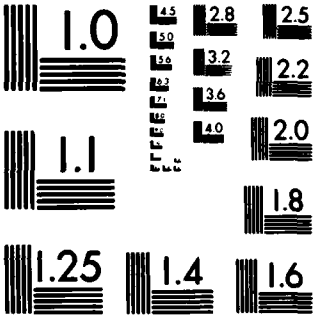
- **YES**
- **NO**

If a comment is asked for, add the appropriate remarks and observations in the column for **COMMENTS.** If you need more information, write **UNKNOWN** in this column.

AD-A145 077 HOW TO EVALUATE TRAINING(U) IMPERIAL IRANIAN GROUND FORCES COMBAT RESEARCH AND EVALUATION CENTER 30 SEP 82 DAAG29-18-D-0100 3/4

UNCLASSIFIED F/G 5/9 NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

QUESTIONS 26 THROUGH 32: LECTURES—TRAINING OBJECTIVES

Background

When the instructor tells the soldiers the training objectives, the soldiers learn better because they know

- what is coming, and
- what is expected of them when the training is over.

Question 26

Question 26: Were the soldiers told the training objectives?

Check **NO** if at the beginning of training the instructor did not tell the soldiers what skills and knowledge they would be expected to know and perform at the end of training.

Question 27

Question 27: Were the soldiers told the training objectives including tasks, conditions and standards?

Check **NO** if at the beginning of training the instructor did not explain each training objective including

- tasks--what soldiers must be able to do
- conditions--what circumstances under which soldiers will perform the tasks
- standards--how accurately and/or how quickly soldiers will have to perform the tasks in order to get a GO.

Question 28

Question 28: Were soldiers told why this training is necessary?

Check **NO** if the instructor did not

- explain the reasons for learning how to perform the tasks
- tell the soldiers what they will be using the skills and knowledge for, and
- tell them why it was important to learn now instead of some other time during the training program.

Continued on next page

Question 29

Question 29: Were the soldiers told how this task fits in with their eventual job duties?

Check **NO** if the instructor did not explain in detail how the tasks to be learned will fit in with the soldiers' future job duties.

Question 30

Question 30: Were the soldiers told how this training fits in with things that they have already learned and things they will learn later?

Check **NO** if the instructor did not tell the soldiers how this lesson fits in with things they have already learned or with things they will learn in the future.

Question 31

Question 31: Were soldiers told what would happen to them if they did (or did not) learn this task?

Check **NO** if the instructor did not tell the soldiers what would happen to them or to their job performance if they learned or did not learn the task.

Note: *This includes the rewards for learning and the penalties for not learning.*

Question 32

Question 32: Did the soldiers have a training schedule available to them?

Check **NO** if each soldier

- was not provided with a copy of the training schedule, or
- the schedule was not posted in a known location that the soldiers could get to.

Note: A training schedule should show what training is scheduled and include the time and place.

QUESTIONS 33 THROUGH 36: LECTURES—TERMINOLOGY

Background

When the instructor explains new terms and concepts to the soldiers it makes the training easier to follow. It also helps the soldiers understand what they are doing during practice.

Question 33

Question 33: Did the instructor question the soldiers about what they were already supposed to know?

Check **NO** if the instructor did not ask the soldiers questions about what they already know before starting training.

Question 34

Question 34: Did the instructor tell the soldiers how the equipment worked and label the parts?

Check **NO** if the instructor did not explain

- each piece of equipment, and
- the names of all the parts.

COMMENT on any equipment that was not explained and parts that were not identified.

Question 35

Question 35: Did the instructor define terms new to the soldier and identify newly introduced equipment?

Check **NO** if the instructor did not define all new terms, equipment or parts of equipment when they were first introduced.

COMMENT on any

- new terms not defined, or
- parts or equipment introduced during the training that were not identified.

Question 36

Question 36: Did the instructor provide the concepts and terminology needed by the soldiers?

Check **NO** if the instructor did not introduce and explain the concepts and terms the soldiers need in order to

- follow the instructor's demonstration, and
- understand what they are doing during practice.

QUESTIONS 37 THROUGH 42: DEMONSTRATION

Question 37

Question 37: Were the tasks demonstrated by the instructor?

Check **NO** if the instructor did not demonstrate each task by performing each step that the soldiers must learn.

Question 38

Question 38: Was each subtask demonstrated?

Check **NO** if the instructor did not demonstrate each of the subtasks listed in the lesson plan. (See Worksheet 1, Lesson Plan, for the list of subtasks.)

Question 39

Question 39: Were demonstrations conducted on equipment listed in the training plan?

Check **NO** if the task was not demonstrated using the equipment listed in the lesson plan. (See Worksheet 1, Lesson Plan, for the list of equipment.)

COMMENT about how the situation was different. (Example: actual equipment was listed in the lesson plan but the instructor demonstrated the task using a simulator or mock-up.)

Question 40

Question 40: Could demonstrations be seen and heard by all soldiers?

Check **NO** if

- you saw soldiers shifting positions trying to get a better view
- the instructor could see, but the soldiers could not
- soldiers asked the instructor to repeat information.

COMMENT on anything that prevented soldiers from seeing or hearing the demonstration.

Continued on next page

Question 41

Question 41: Were demonstrations conducted in small enough steps so that the soldiers could easily follow the instructor's actions?

Check **NO** if

- soldiers seem unable to follow the demonstration, and
- soldiers ask questions which cause the instructor to repeat the demonstration and fill in new information.

COMMENT if the steps in the demonstration were too large and indicate

- at what point soldiers could not follow the demonstration, and
- what information was added when the instructor repeated that part of the demonstration.

Question 42

Question 42: Did the instructor ask the soldiers for questions immediately following the demonstration?

Check **NO** if the instructor did not ask for questions

- after each subtask, and
- after the whole task has been demonstrated.

QUESTIONS 43 THROUGH 53: PRACTICE

Question 43

Question 43: Did all soldiers practice?

Check **NO** if all soldiers did not get hands-on practice for each of the tasks listed in the training objectives. (See Worksheet 1, Lesson Plan.)

COMMENT on any practice that was done not hands-on and indicate the

- specific tasks that were not practiced
- the number of soldiers who did get practice, and
- the number who did not get practice.

Question 44

Question 44: Were soldiers initially allowed to practice subtasks in isolation from other subtasks?

Check **NO** if the soldiers were not initially allowed to practice each subtask by itself.

Check **NA** when

- there are no subtasks, or
- soldiers cannot perform each subtask independently.

Question 45

Question 45: Was the practice on each subtask hands-on using the equipment listed in the lesson plan?

Check **NO** if soldiers did not perform subtasks on the equipment specified in the lesson plan. (See Worksheet 1, Lesson Plan.)

COMMENT if the equipment used was not in the lesson plan or if the soldiers used simulators or mock-ups and the lesson plan listed the actual equipment.

Continued on next page

Question 46

Question 46: Were the soldiers required to practice subtasks under the various conditions they are likely to encounter on the job?

Check **NO** if the soldiers are <u>not</u> allowed to practice the subtasks under the various conditions they are likely to encounter on the job.

<u>Example</u>: When practicing to track targets using the Tank Gunners Primary Sight, the gunner should be allowed to track

- different targets
- targets moving at different speeds
- targets which are moving in different directions from the tank.

Question 47

Question 47: Did each soldier practice each subtask to standard, unassisted, before going on to whole-task practice?

Check **NO** if each soldier was <u>not</u> required to practice each subtask before being allowed to practice the whole task. The practice <u>must</u> be

- to standards, <u>and</u>
- without help.

(See Worksheet 1, Lesson Plan, or standards for subtasks.)

Question 48

Question 48: Were the soldiers allowed to practice the task as a whole (i.e., practicing subtasks together)?

Check **NO** if soldiers did not practice the whole task, using all the subtasks in the correct order.

Question 49

Question 49: Were the soldiers required to meet the overall standard in performing the entire task unassisted?

Check **NO** if each soldier was <u>not</u> required to perform the entire task, unassisted, to the standard listed in the training objective. (See Worksheet 1, Lesson Plan.)

Continued on next page

Question 50

Question 50: Did a lot of soldiers have trouble with the same step during practice?

Check **YES** if several soldiers had trouble with the same steps during practice.

COMMENT on the step and the trouble the soldiers were having.

Note: You should watch practice closely to identify the parts of the task that cause particular problems for the soldiers.

Question 51

Question 51: Was sufficient repetition allowed during practice?

Check **NO** if soldiers did not repeat each task and subtask enough times during practice.

Check **YES** if soldiers

- practiced each task or subtask to standard at least once without help, and
- practiced new or unusually different tasks to standard as many times as they needed to become proficient.

COMMENT if the soldiers

- did not practice to standard at least once without help, and/or
- practiced unassisted to standard, but you did not feel that it was enough.

Question 52

Question 52: Did every soldier practice under the direct supervision of an instructor?

Check **NO** if an instructor did not observe all of the practice activities for each soldier.

COMMENT on any unsupervised practice.

Question 53

Question 53: Was remedial training scheduled for the soldiers who had not performed to standard during practice?

Check **NO** if the instructor did not schedule remedial training for soldiers who were unable, after considerable practice, to perform the task to standard.

QUESTIONS 54 THROUGH 58: FEEDBACK

Definition

Feedback is telling the soldier exactly what is going wrong and what is going right during training.

Feedback is very important because soldiers can't correct mistakes if they don't know they're making them.

Question 54

Question 54: Were soldiers told what they were doing right or wrong during practice?

Check **NO** and **COMMENT** if during training, the instructor did not

- tell each soldier what they were doing correctly and incorrectly, and
- stop soldiers who were making mistakes
  - tell them what they were doing wrong, and
  - show them how to do it correctly.

Question 55

Question 55: Was feedback provided as soon as possible following actions?

Check **NO** if the instructor did not tell soldiers what they did wrong and how to correct it as soon as possible, instead of waiting until the soldier has completed the task or subtask.

Check **YES** if the instructor told soldiers

- they are performing well, and
- they have successfully completed a task or subtask.

Question 56

Question 56: Was feedback specific to actions and free of ridicule?

Check **NO** if the instructor

- made comments that were too general

  Examples:
  - "that was wrong" (without saying exactly what was wrong)
  - "that's a NO GO" (without explaining why)
  - "Step 3 was wrong" (without explaining how it was wrong)

- punished the soldier for poor performance
- made negative comments about the soldier.

COMMENT about what the instructor said or did.

Continued on next page

Question 57

Question 57: Was faulty performance identified and corrected?

Check **NO** if the instructor did not

- point out a soldier's mistakes, and/or
- help the soldier overcome the difficulty with additional instruction.

Question 58

Question 58: Was the amount of feedback given a soldier gradually reduced as the soldier progressed?

Check **NO** if the instructor continually gave feedback no matter how well the soldier was performing.

Note: In the early stages, the soldiers may make many mistakes and the instructor will give frequent feedback. As the soldiers progress, make fewer mistakes and start correcting their own performance, the instructor will need to provide little, if any, feedback.

QUESTIONS 59 THROUGH 61: JOB AIDS

Definition: Job Aid

A job aid is something the soldiers will use on the job to help them perform their tasks.

Question 59

Question 59: Were job aids given to the soldiers at the beginning of training?

Check **NO** if the instructor did not pass out job aids at the beginning of the training.

Question 60

Question 60: Did the instructor require the soldiers to use the job aid as prescribed in the lesson plan?

Check **NO** if the instructor did not require the soldiers to use the job aids according to the lesson plan. (See Worksheet 1, Lesson Plan)

Question 61

Question 61: Did the job aids appear to be accurate and beneficial to the soldiers?

Check **NO** if job aids made the task more difficut and

- instructors comments were negative about the job aid
- soldiers comments were negative, or
- soldiers could not use the job aids effectively.

QUESTION 62: TRAINING EVENTS

Background

When soldiers are learning <u>how to do</u> something, the training should occur in this order

- a lecture
- a demonstration
- a practice.

Question 62

Question 62: Did the training events progress from lecture to demonstration to practice?

Check **NO** if the soldiers were learning how to do something and events did <u>not</u> progress from lecture to demonstration to practice.

Check **NA** if the soldiers were learning <u>about</u> something, instead of <u>how to do</u> something.

<u>Note</u>: Talking about the steps is <u>not</u> a substitute for a hands-on demonstration. Having the soldier explain the actions is <u>not</u> a substitute for hands-on practice.

QUESTIONS 63 THROUGH 72: GENERAL OBSERVATIONS—TRAINING PLAN

Question 63

Question 63: Did the instructor follow the lesson plan?

Check **NO** if the instructor did not follow the lesson plan.

Check **YES** and **COMMENT** if the instructor

- taught the content outlined, and
- conducted the training activities in the proper order.

(See Worksheet 1, Lesson Plan, for the order of the material.)

Question 64

Question 64: Were training aids and training materials called for in the lesson plan actually used?

Check **NO** if the instructor did not use all the training aids and materials called for in the lesson plan. (See Worksheet 1, Lesson Plan.)

Question 65

Question 65: Did the instructor follow the sequence on the lesson plan worksheet?

Check **NO** if the instructor did not teach the training events in the order shown in the lesson plan. (See Worksheet 1, Lesson Plan.)

Question 66

Question 66: Was the instructor's presentation well organized?

Check **NO** if the instructor

- moved quickly from topic to topic, or
- continually had to go back over material.

Question 67

Question 67: Were basic rules and standard procedures presented before exceptions?

Check **YES** if the instructor always presented basic rules and standard procedures before presenting exceptions to those rules and procedures.

Continued on next page

Question 68

Question 68: Were critical discriminations emphasized?

A critical discrimination is the ability to know when or when not to perform an action simply by looking at the situation or piece of equipment.

Check **NO** if critical discriminations were not a major part of the training.

Check **YES** and **COMMENT** if critical discriminations were emphasized.

Example: An instructor looks at a pair of brake shoes, and simply by looking, decides whether or not to replace them.

Critical discriminations can be taught and evaluated. Using the brake replacement as an example, the instructor should

- tell soldiers what to look for
- show examples of good and bad brake shoes
- point out the difference in the examples
- have the soldiers practice making a visual identification and decide on that basis to do or not do something.

Question 69

Question 69: Did the training focus on how to do something rather than talking about what to do?

Check **NO** if

- soldiers did not have the opportunity to practice tasks, and/or
- training is restricted to explaining principles or talking about performance.

Question 70

Question 70: Were soldiers sometimes standing around with nothing to do during training?

Check **NO** if you do not see soldiers standing around or talking anytime except during breaks.

Continued on next page

Question 71

Question 71: Did the instructor seem to have enough time to conduct the training as planned?

Check **NO** and **COMMENT** if any training events were shortened or left out in order to finish within the planned time. Identify those events that were cut short or left out.

Check **YES** if the instructor completes all the training as described in the lesson plan.

Question 72

Question 72: Did the instructor give a summary?

Check **NO** if the instructor did not provide a summary of the training that reviewed the training objectives and the important parts of the lesson content.

QUESTIONS 73 THROUGH 75: GENERAL OBSERVATIONS—TRAINING AIDS

Definition

Training aids are equipment or materials that improve training by making it easier to understand.

Examples of training aids include

- slides
- films
- audio-visual equipment
- chalkboards

- models
- mock-ups, and
- standtables

Question 73

Question 73: Did the instructor use training aids effectively?

Check **NO** and **COMMENT** if the instructor did not make effective use of training aids.

The instructor must correctly use training aids in order to make them work effectively. For example

- writing must be large and easy-to-read on chalkboard and charts
- sound must be loud enough on A/V equipment for everyone to hear
- slides must stay up long enough for everyone to read.

Question 74

Question 74: Were the training aids accurate?

Check **NO** if

- the instructors or soldiers comment that the training aids contain errors or are out-of-date
- you notice errors in the training aids.

COMMENT on any errors in the training aids.

Continued on next page

Question 75

Question 75: Did the training aids seem to confuse the soldiers?

Check **NO** if the training aids helped make the training easier to understand.

Check **YES** if the soldiers

- seem confused when the training aids were introduced
- asked questions that indicated they did not understand the training aids.

Example: Training aids are confusing when

- slides or charts have too much detail, or
- complex graphs or figures are presented without enough explanation.

QUESTIONS 76 THROUGH 87: GENERAL OBSERVATIONS—INSTRUCTOR PERFORMANCE

Question 76

Question 76: Did the instructor move smoothly from one learning activity to the next?

Check **NO** if the instructor did not relate a new training activity to the activity that came before.

COMMENT on any times when the instructor abruptly began a new training activity without connecting it to the preceding activity.

Question 77

Question 77: Did the instructor emphasize what the soldiers need to know?

Check **NO** if the instructor does not emphasize information essential to doing the job by

- repeating the information frequently
- going over the information for a longer period of time
- stressing the importance of the information.

Question 78

Question 78: Did the instructor include material that is not in the lesson plan?

Check **NO** if the instructor did not add any material to lesson plan.

Check **YES** and **COMMENT** about the material that was added.

Question 79

Question 79: Did the instructor minimize unnecessary detail and refrain from telling unrelated "war stories"?

Check **NO** if the instructor stuck to the training tasks and did not

- go into a lot of detail that was unnecessary
- include things that are "nice to know" but not essential
- tell war stories that were entertaining, but unrelated to the training.

Continued on next page

Question 80

Question 80: Were the soldiers encouraged to actively participate (i.e., questioning, discussing, performing) during training?

Check **NO** if the instructor

- did all the talking, and
- gave soldiers few chances to talk or participate.

Check **YES** and **COMMENT** if the instructor

- created opportunities for soldiers to actively participate
- offered topics for discussion, and/or
- asked questions that led to discussion.

Question 81

Question 81: Did the instructor ask the soldiers if they had any questions during lecture, demonstration, practice?

Check **NO** if the instructor

- did not ask for questions several times following the lecture, the demonstration and the practice activities, or
- only asked for questions at the end of the lesson.

Question 82

Question 82: Did the instructor set a tone which encouraged soldier questioning?

Check **NO** if the instructor

- showed by words or actions that soldier questions were "bothersome"
- "put off" answering questions
- acted annoyed when asked a question, and/or
- "put down" soldiers who asked questions.

Check **YES** if the instructor

- indicated a willingness to answer any questions the soldiers might have
- answered questions respectfully.

Continued on next page

Question 83

Question 83: Did the instructor answer the soldiers' questions?

Check **NO** if the instructor

- talked around questions
- passed questions off as 'dumb'
- made jokes out of questions.

Check **YES** if the instructor

- answered questions promptly, correctly and with language the soldiers could understand
- said "I don't know, I'll find out" when he didn't know the answer.

Question 84

Question 84: Did the instructor answer all the soldiers' questions?

Check **NO** if the instructor did not answer all the questions.

COMMENT giving a count of questions that were answered and questions that were not.

Question 85

Question 85: Did the instructor answer all the soldiers' questions to their satisfaction?

Check **NO** if the instuctor did not

- make sure that the soldier who asked the question was satisfied with the answer, and
- explore the question further if the soldier was still puzzled.

COMMENT any time the instructor could not give a satisfactory answer to a soldiers' question.

Continued on next page

Question 86

Question 86: Did the instructor use class time effectively?

Check **NO** if you see

- soldiers standing around waiting
- time being used up to locate, set-up or adjust training equipment
- breaks that are too frequent or too long
- the instructor stop training early before all soldiers have done the tasks to standard.

Question 87

Question 87: Did the instructor show a positive attitude toward the training and the soldiers?

Check **NO** if the instructor

- treats training like an unpleasant chore
- finishes as quickly as possible
- ridicules soldiers or makes them feel inadequate.

Check **YES** if the instructor

- was enthusiastic about the material
- shows the soldiers that teaching is useful and important
- shows confidence in the soldiers and treats them with respect.

QUESTIONS 88 AND 89: GENERAL OBSERVATIONS—TRAINING DURATION

Question 88

Question 88: Did the class start and end on time?

Check **NO** if the class started or ended at a different time from the one shown on the training schedule.

COMMENT by recording the actual starting or ending time, if different, from the scheduled time.

Question 89

Question 89: Was the actual training time somewhat shorter or longer than the time allotted?

Check **NO** if the actual training time was the same as the one shown on the training schedule and in the lesson plan. (See Worksheet 1, Lesson Plan.)

Check **YES** and **COMMENT** if the training was more than a few minutes shorter or longer than the planned time. Record the amount of time actually spent in training.

PART 3
TEST OBSERVATION QUESTIONS

OVERVIEW

Introduction

This part of Section Three contains a detailed explanation of the questions that may appear on Worksheet 4, Testing Observation.

Where to look

You can look up information about specific questions on the following pages.

QUESTIONS	TOPIC	PAGE
90-93	Test Instructions	3-3-2
94-98	Matching Testing And Training	3-3-3
99-102	Test Realism	3-3-4
103-106	Testing Procedures	3-3-5
107-109	Test Feedback	3-3-7

Note

Every question on the worksheet should have a check (✓) or an **NA** (Not Applicable) in one of the following columns:

- **YES**
- **NO**

If a comment is asked for, add the appropriate remarks and observations in the column for **COMMENTS.** If you need more information, write **UNKNOWN** in this column.

QUESTIONS 90 THROUGH 93: TEST INSTRUCTIONS

Question 90

Question 90: Did the instructor read the test instructions directly from the lesson plan?

Check **NO** if the instructor

- did not read the test instructions directly from the lesson plan (see Worksheet 1, Lesson Plan)
- gave the instructions using different words
- repeated the instructions from memory.

Question 91

Question 91: Were the test instructions stated clearly enough for the soldiers to know what they were expected to do?

Check **NO** if

- the instructior did not read the instructions slowly and deliberately
- the test instructions did not tell the soldiers the
  - tasks and subtasks to be performed
  - conditions they will be performed under
  - equipment/tools they will have and can use
  - standards they must meet
  - cues that will tell them to start and stop.

Question 92

Question 92: Were pass/fail standards provided to the soldiers?

Check **NO** if

- the instructor did not give the standards that were going to be used for task performance just prior to the test
- the pass/fail standards did not tell how accurately and/or how quickly the task had to be done in order to pass the test.

Question 93

Question 93: Were pass/fail standards clearly explained such that soldiers would know when they performed correctly?

Check **NO** if soldiers indicate through words or actions that they do not understand the test standards.

QUESTIONS 94 THROUGH 98: MATCHING TESTING AND TRAINING

Question 94

Question 94: Did the test occur soon after the completion of training?

Check **NO** if the test is not given immediately after the training is completed.

COMMENT on the length of the delay between training and testing.

Question 95

Question 95: Were all the tasks specified in the training objectives tested?

Check **NO** if all the tasks listed in the training objectives were not tested. (See Worksheet 1, Lesson Plan, for list of tasks.)

COMMENT on any tasks that were not tested.

Question 96

Question 96: Were soldiers tested on any tasks that were not taught?

Check **NO** if the soldiers were tested only on what they were taught.

Check **YES** and **COMMENT** on any differences between what was taught and what was tested.

Question 97

Question 97: Were the testing conditions the same as the training conditions?

Check **NO** if

- the testing conditions were different from the training conditions, or
- if the testing or training conditions differ from the conditions described in the training objective. (See Worksheet 1, Lesson Plan for testing conditions.)

Question 98

Question 98: Were the standards specified in the training objectives used to score the test performance?

Check **NO** if standard other than those listed in the training objectives were used to score performance. (See Worksheet 1, Lesson Plan for standards.)

COMMENT on the standards that were used.

QUESTIONS 99 THROUGH 102: TEST REALISM

Question 99

Question 99: Were critical decisions and difficult actions required on the job omitted from the test?

Check **NO** if the test included the critical decisions and difficult actions of a task.

Critical decisions and difficult actions the soldier must do on the job should be included on the test.

Question 100

Question 100: Were critical discriminations included on the test?

Check **NO** if critical discriminations emphasized in training were not included on the test.

COMMENT on the critical discrimination not tested and the training objective or tasks it related to.

(See Question 68, page 3-2-15 in this job aid for examples of critical discriminations.)

Question 101

Question 101: Did the test come as close as possible to measuring performances as it would occur under actual job conditions?

Check **NO** if the test does not

- come as close as possible to measuring performances as it would occur under actual job conditions, and
- require the soldiers to perform the actions in relatively close order to that required on the job.

COMMENT if the test differs greatly from what the job requires.

Note: Sometimes job conditions cannot be used in training, or it is too expensive to reproduce job conditions. When this is the case, use the standard "as close as possible".

Question 102

Question 102: Did the test require that the soldiers perform tasks together that must be performed as a unit on the job?

Check **NO** if tasks that are done together were tested separately.

QUESTIONS 103 THROUGH 106: TESTING PROCEDURES

Question 103

Question 103: Did the same person act as both examiner and instructor?

Check **NO** if the person who tested the soldiers on the tasks was not the same person who trained the soldiers on the same tasks.

Question 104

Question 104: Did the examiner help the soldiers in any way during the test?

Check **NO** if the examiner did not "help" the soldiers.

Check **YES** if the examiner

- did any part of the task the soldier was supposed to perform
- offered hints, suggestions or prompts, and/or
- gave cues, such as
  - clearing throat
  - rolling eyeballs
  - muttering under breath.

Question 105

Question 105: *Did the examiner apply the standards specified* in the training objectives consistently and objectively?

Check **NO** and **COMMENT** if the examiner

- *relaxed standards* because something interfered with test performance
- "felt" the soldier could pass and gave a GO although standards were not met
- gave a soldier a GO because the soldier "came close" or has a "good reason" for failing
- applied different standards to different soldiers.

Check **YES** if the examiner

- used the standards listed in the training objectives (See Worksheet 1, Lesson Plan, for standards.)
- applied the same standards to every soldier for every task.

Continued on next page

Question 106

Question 106 Did the soldiers receive artificial cues or help during the test?

Check **NO** if the soldiers got only the materials listed in the conditions statement of the training objective. (See Worksheet 1, Lesson Plan for testing conditions.)

Check **YES** and **COMMENT** if

- soldiers got outside help of any kind
- soldiers watched other soldiers being tested before taking the test themselves
- soldiers were present after they had taken the test and helped other soldiers
- the examiner scored the test or gave feedback during the test
- the examiner gave hints or cues of any kind
- the examiner did parts of the test for the soldiers.

QUESTIONS 107 THROUGH 109: TEST FEEDBACK

Question 107

Question 107 Were soldiers told what they did right or wrong on the test?

Check **NO** if, following the test, the examiner did not

- tell the soldiers how they did on each task
- explain what was correct and what was incorrect on any task missed
- show soldiers how to perform the parts of the task they missed
- suggest how to improve performance.

Question 108

Question 108: Was feedback given as soon as possible after the test?

Check **NO** if soldiers did not receive feedback

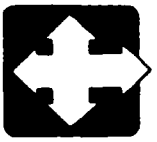
- immediately after each task and subtask for a performance test
- as soon as possible after a written test.

Question 109:

Question 109: Was feedback specific to the soldiers actions and free of ridicule?

Check **NO** if the feedback was general, or attacked or ridiculed the soldier personally.

Check **YES** if the feedback was specific and was about the soldier's actions, not about the soldier personally.



Information Mapping, Inc.
First in Information Organization

June, 1983

Project No. 162

A JOB AID FOR RECOMMENDING TRAINING PROGRAM MODIFICATIONS

Prepared for:

U.S. Army
Training Developments Institute

By:

Information Mapping, Inc.

NOTICE
This manual has been developed using the standards of the Information Mapping® writing service. Information Mapping is a registered trademark of Information Mapping, Inc. of Lexington, Massachusetts.

1050 Waltham Street, Lexington, MA 02173 (617) 861-1730

This manual was originally researched and written by Donald M. Kristiansen and Bobby G. Witmer for the U.S. Army Research Institute for Behavioral and Social Sciences, Fort Knox Field Unit, Steel Hall, Fort Knox, KY, 40121.

A JOB AID FOR RECOMMENDING TRAINING PROGRAM MODIFICATIONS—TABLE OF CONTENTS

A JOB AID FOR RECOMMENDING TRAINING PROGRAM MODIFICATIONS

- Introduction..... iii

SECTION ONE -- GENERAL INFORMATION

- Overview..... 1-1
- Training Objectives..... 1-2
- Practice..... 1-3
- Feedback..... 1-5
- General Problems and Recommendations..... 1-6
- When to Modify Training..... 1-9
- Recommending Changes..... 1-10

SECTION TWO -- THE TRAINING OBSERVATION WORKSHEETS

- Overview..... 2-1
- Modifying Training Programs..... 2-2
- How to Use the Worksheets..... 2-3

SECTION THREE -- MODIFYING THE TRAINING ENVIRONMENT--WORKSHEET 2

- Overview..... 3-1
- Modifying the Training Environment--Worksheet 2..... 3-2
- Training Environment Questions..... 3-3
- Questions 1 through 2: Number of Instructors..... 3-6
- Questions 3 through 7: Training Equipment..... 3-8
- Questions 8 through 15: Training Site..... 3-10
- Questions 16 through 22: Training Distractions..... 3-12
- Questions 23 through 25: Training Duration..... 3-15

Continued on following page

A JOB AID FOR RECOMMENDING TRAINING PROGRAM MODIFICATIONS—TABLE OF CONTENTS, Continued

SECTION FOUR -- MODIFYING THE TRAINING PROCESS--WORKSHEET 3

- Overview..... 4-1
- Modifying the Training Process--Worksheet 3..... 4-2
- Training Observation Questions..... 4-3
- Questions 26 through 32: Lecture Events--Training Objective... 4-9
- Questions 33 through 36: Lecture Events--Terminology..... 4-12
- Questions 37 through 42: Demonstration..... 4-12
- Questions 43 through 53: Practice..... 4-17
- Questions 54 through 58: Feedback..... 4-21
- Questions 59 through 61: Job Aids..... 4-23
- Questions 62: Training Events..... 4-24
- Questions 63 through 72: General Observations--Lesson Plan.... 4-25
- Questions 73 through 75: General Observations--Training Site.. 4-30
- Questions 76 through 87: General Observations--Instructors.... 4-32
- Questions 88 through 89: Training Duration..... 4-36

SECTION FIVE -- MODIFYING THE TESTING PROCESS--WORKSHEET 4

- Overview..... 5-1
- Modifying the Testing Process--Worksheet 4..... 5-2
- Testing Observation Questions..... 5-3
- Questions 90 through 93: Test Instructions..... 5-6
- Questions 94 through 98: Matching Testing and Training..... 5-8
- Questions 99 through 102: Testing Realism..... 5-11
- Questions 103 through 106: Testing Procedures..... 5-13
- Questions 107 through 109: Test Feedback..... 5-15

NOTICE

This manual has been developed using the standards of the Information Mapping® writing service. Information Mapping is a registered trademark of Information Mapping, Inc. of Lexington, Massachusetts.

A JOB AID FOR RECOMMENDING TRAINING PROGRAM MODIFICATIONS

INTRODUCTION

Introduction

This job aid describes

- how to use the collected data to determine if training modifications are necessary
- when to recommend training modifications, and
- which modifications to recommend for a training program.

This job aid will help the Training Analyst suggest changes that can reduce problems discovered during the Training Program Evaluation.

Effective training

Effective training consists of five main parts.

- Presentation (lectures, films, slides, etc.) of the words and concepts related to the task.
- Demonstration of the task, after the presentation of information, which gives soldiers a "model" performance to judge their own performance against.
- Subtask practice which soldiers must do after the demonstration.
- Whole task practice which puts all the subtasks together into a smooth performance.
- Testing held <u>after</u> training is finished, to make sure soldiers can perform the task under the proper conditions <u>and</u> up to the specified standard.

Focus on training

It is important to remember that modifications should <u>only</u> be made to these training areas. The Training Program Evaluation evaluates how someone is being trained <u>not</u> what is being trained.

Continued on next page

This job aid

This job aid contains following sections:

SECTION	PAGE
One: General Information	1-1
Two: The Training Observation Worksheets	2-1
Three: Modifying the Training Environment-- Worksheet 2	3-1
Four: Modifying the Training Process-- Worksheet 3	4-1
Five: Modifying the Testing Process-- Worksheet 4	5-1

SECTION ONE
GENERAL INFORMATION

OVERVIEW

Introduction

Before beginning a modification of any training program, it is important to review the general guidelines for recognizing and recommending changes.

In this section

This section of the job aid covers the following general information:

SECTION ONE: GENERAL GUIDELINES	PAGE
Training Objectives	1-2
Practice	1-3
Feedback	1-5
General Problems and Recommendations	1-6
When to Modify Training	1-9
Recommending Changes	1-10

TRAINING OBJECTIVES

Definition

A training objective determines

- what is taught
- to what level of proficiency, and
- under what conditions.

Parts of a training objective

A training objective consists of

- tasks
- conditions, and
- standards.

Writing a task statement

The task statement should describe in detail what the soldiers will be able to do after training that they could not do before training.

Remember: The focus in a task is on the action verb.

Example

For example, soldiers can

- repair things when they are broken, or
- reassemble things when they have been taken apart.

Writing a condition statement

The condition statement should describe in detail the environmental conditions under which the soldiers will be able to do the task and the tools, job aids or other equipment that will be available to help them with task performance.

Example

If a task performance requires the use of a tank, a rifle, a wrench, a manual, or a job aid, then that should be specified and provided to the soldiers when they are required to perform the task.

Writing a standard statement

The standard statement describes in detail how well the soldiers must do the task to receive a GO.

It is a list of criteria for knowing when a task has been done right. It tells soldiers when an acceptable performance is reached.

Standard statements are usually written in terms of time and/or accuracy.

Example

The standard for repairing something is usually expressed in terms of how long it takes, and whether it works properly when repaired.

PRACTICE

Introduction	All skills require hands-on practice for successful training.
Definition	Practice is when soldiers actually do an activity to learn a skill.
General guidelines for practice	Soldiers should perform a task correctly during hands-on practice. Instructors should always supervise practice to make sure a correct performance is learned.
Time limits	Each soldier should practice a task until they perform the task correctly at least once.
Scheduling practices	Practice sessions should be scheduled based on the following information: • what task is being taught • how experienced the soldiers are • how well the soldiers will retain the skills being practiced.
Practicing unfamiliar or difficult tasks	It may be necessary to schedule short and frequent practice sessions when teaching an unfamiliar or difficult task. This type of practice schedule is also helpful when a task requires the coordination of several subtasks.
Part task practice	Part task practice is practice on a subtask or • a step in a long sequence, or • a set of actions that are part of a task. Note: Part task practice should occur when a soldier cannot master a sequence or a group of subtasks in one practice.

Continued on next page

Idle time	The number of soldiers per practice session and the schedule of practice events should allow almost no idle time. Concurrent training stations should be set up if a practice session results in too much time wasting around to practice. Remember: Concurrent training stations are several training sites at which a different training event is happening at the same time.
The purpose of practice	Practice sessions should result in progress for a soldier being taught a task performance. Assistant instructors should be able to judge if progress is being made during practice.

FEEDBACK

Introduction	Feedback is an important part of practice. A soldier learns a skill not just by trying to perform, but by finding out through practice what can be done correctly or incorrectly.
Good feedback is critical	A soldier will need a lot of feedback when first learning a task. Accurate and timely feedback is so crucial to successful training that many deficiencies in a soldier's task performance are a result of inadequate feedback.
What feedback provides	A soldier should know if the performance of an action is right or wrong. Feedback should specify whether the actions are correct or incorrect.
Give immediate feedback	Feedback should occur while the soldier still clearly remembers what he did incorrectly. Feedback should also occur before the next action in a task is practiced. Feedback should always be given without delay.
The value of positive feedback	Feedback should also help the soldier see when progress is being made. Soldiers need periodic recognition by an instructor to maintain their motivation. Positive feedback is as important as critical feedback.

GENERAL PROBLEMS AND RECOMMENDATIONS

Introduction	Before looking for the recommended modifications, it is useful to first read the following eight general reasons for inefficient and/or ineffective training. Experience has shown that these are the most common reasons why training produces an unacceptable number of NO GO's.
In general	Inefficient and/or ineffective training happens for a number of reasons, but it usually results from poor planning or poor implementation of a good plan.
Problem 1: Site preparation	**Problem: The training site was not set up before training.** The instructor should always make sure that the training site is set-up for training activities before training begins. If the training is in a classroom, the room should be checked for • availability of key(s) • working and adequate lights and heat • sufficient chairs, desks, etc.
Problem 2: Equipment preparation	**Problem: The necessary training equipment was not at the site and/or in good working order.** The instructor should be sure that all training equipment meet the following conditions: • set up at the site when soldiers arrive • complete with all necessary parts in good working order, and • ready to use for training. Equipment availability and condition should be checked 2 hours in advance. This allows enough time for repair or replacement if necessary. Class time should not be used to obtain, check out, or repair any equipment used for training.

Continued on next page

Problem 3: Hand-out distribution

Problem: Soldier hand-outs were not provided in advance or at the very beginning of training.

The instructor should make a point to get all hand-outs to the soldiers before training begins. This enables soldiers to read the material without disrupting class or wasting training session time.

Problem 4: Allocating time

Problem: Concurrent training stations were not used when all soldiers could not be accommodated at a training site.

The instructor should avoid having any wasted time in training. No one should be standing around waiting for something to happen. If there are any lines of soldiers waiting for training, concurrent training sites should be used.

If there are not enough training sites to simultaneously accommodate all the soldiers, then eliminate one site and use the instructor for concurrent training. The point is to plan properly and avoid any "hurry up and wait" situations.

Remember: Concurrent training stations are several training sites at which a different training event is happening at the same time.

Problem 5: Avoiding repetition

Problem: Current training duplicates previous training within the same course.

This problem occurs for a variety of reasons:

- instructors may not be aware of what training preceded them and repeat instructions
- instructors may repeat because they do not know that soldiers can perform to standard on prerequisite skills/ knowledges
- instructors might actually know that previous training did not bring soldiers to standard.

Training developers and course managers can help avoid the problem by making sure that the course design is carefully planned. This will insure proper course scope and the sequencing of objectives to avoid duplication.

The training must also be designed so that soldiers are not allowed to progress in training unless they have mastered the earlier skills and information. The instructors will know that the prerequisites have been covered and can avoid duplicating earlier training.

Continued on next page

Problem 6: Unnecessary training

Problem: Unnecessary instruction was given on skills/ knowledge the soldiers already had.

Instructors should check soldier's proficiency, either formally or informally, before training starts. When soldiers are found to be proficient on tasks that were to be "refresher" trained, then the "refresher" training can be eliminated. If only a few soldiers need the training, then they should be the only ones to receive it.

Problem 7: Penalizing rapid self-paced learning

Problem: Rapid completion of self-paced training was penalized.

Soldiers who completed a self-paced training module ahead of other soldiers often feel penalized.

Rules should be formalized and given to soldiers explaining what will happen if they finish early.

The rules should include positive feedback and rewards for soldiers finishing early.

Instructors must stick to the rules if a soldier finishes training ahead of what is considered "normal" time.

If the Instructor does not use the rewards for finishing early, one of the primary benefits of self-pacing will be lost.

Problem 8: Reducing practice time

Problem: Practice time was cut in the name of efficiency.

Training should be focused on the needs of the soldier. If proficiency is the goal of training, and practice produces proficiency, then cutting practice will lower proficiency. This should be remembered when pressures mount to cut training time.

Reducing practice makes training quicker, <u>not</u> more efficient. If practice time has to be cut, standards should be lowered accordingly. This lowering of standards will make it clear to everyone what effect cutting practice time has on a training.

WHEN TO MODIFY TRAINING

Introduction	A training program will be modified when a performance deficiency exists. A performance deficiency is usually determined by looking at the first test results or first retest results of a training program.
Definition	A performance deficiency exists when more than an acceptable percentage of soldiers receive a NO GO on the first test trial. The acceptable percentage is determined by the training developers.
Example	For example, in this job aid we will use 20 percent as the acceptable percentage of NO GO's for training. If more than 20 percent of the soldiers receive a NO GO in a first test trial then it means there are problems with the training. This is true even if the soldiers were retested and received a GO.

RECOMMENDING CHANGES

Finding the problem

Whenever there is an unacceptable percentage of NO GO's on the first test trial, you will need to determine where the problem is using the following resources:

- test score data
- observations and comments on the worksheets, and
- any other available information.

For additional information see Guidelines for Conducting a Training Program Evaluation.

Finding a solution

Once you have determined where the problem is in the training, this job aid can help you determine why the problem occurred and how to modify it.

In the second part of this job aid, the causes of the problem and the recommendations for possible solutions are presented.

Before recommending modifications

Before recommending modifications, the following must be completed:

- evaluation of the lesson plan
- observation of the training process by a qualified observer
- completion of Training Observation Worksheets 2, 3, and 4, and
- examination of the test score data to determine if a performance deficiency exists.

Important: The analyst should not take shortcuts. Each piece of the Training Program Evaluation is necessary for pinpointing problems and focusing on the best possible modifications.

How to recommend modifications

For information on the procedure for recommending modicfications, see Guidelines for a Training Program Evaluation, Section 8.

SECTION TWO
THE TRAINING OBSERVATION WORKSHEETS

OVERVIEW

Introduction

The second part of this job aid contains the specific procedures for reviewing and recommending modifications in a training program.

In this section

This section of the job aid covers Worksheets 2, 3 and 4, and the worksheet questions:

SECTION TWO: THE TRAINING OBSERVATION WORKSHEETS	PAGE
Modifying Training Programs	2-2
How to Use the Worksheets	2-3

MODIFYING TRAINING PROGRAMS

Background

The Army trains thousands of soldiers in hundreds of training courses each year. This experience has enabled the Army to define specific areas of training where problems tend to arise.

In order to monitor these common "problem areas", the Army developed 109 **YES** or **NO** questions in three of the main areas of training:

- the environment in which training is conducted
- the actual training session, and
- performance testing after training is finished.

Observation before modification

The 109 questions are divided into worksheets and used by the training observers when they go out into the field or classroom. The Training Analyst selects questions from the 109 on the list. The **YES** or **NO** answers are critical to pinpointing those areas of training that might need modification.

Be objective

If you stick to the test scores and observations, your evaluation of the efficiency and effectiveness of the training program will be an objective opinion. It will be based on facts, data and observations by trained observers working with detailed worksheets.

The goal of modification

If the training was working well, you would not be trying to modify it. If it worked, an acceptable percentage of soldiers would receive a GO the first time they were properly tested.

Remember that inadequate training can be fixed by implementing the recommended modifications in the

- lesson plan
- training environment
- training session, and/or
- performance testing.

For more information

For more general information on how to modify a training program, see Guidelines For Conducting A Training Program Evaluation (TPE).

HOW TO USE THE WORKSHEETS

The worksheets

There are three worksheets that will be used to help recommend modifications.

- Worksheet 2, Training Environment (Questions 1-25)--contains items that relate to the way the training site is set-up
- Worksheet 3, Training Observation (Questions 26-89)--these questions focus the observer's attention on the actual training session(s)
- Worksheet 4, Testing (Questions 90-109)--contains possible problem areas to look for in the testing process

Note: Worksheet 1, Lesson Plan is prepared by the analyst and used by the observer during observation. Worksheet 1 is not in this job aid. For information on recommending modifications in the lesson plan, see the following:

- A Job Aid for the Evaluation of Lesson Plans
- Guidelines for Conducting A Training Program Evaluation.

Remember

Remember that you would not be trying to fix training if it worked well. If it worked, an acceptable percentage or more of the soldiers would receive a **GO** the first time they were tested.

This assumes that both you and the observer have found no problems with the test.

If you stick to the data--test scores and observation--your evaluation of the training programs efficiency and effectiveness will be an objective opinion. It will be a fact based on facts, data and observations by trained observers working with detailed worksheets.

If the program did not work, training can be fixed by implementing the recommended modifications in the

- objectives
- resources
- training methods
- prerequisite skills/knowledges.

Continued on next page

Procedure

Use this procedure for finding recommendations.

STEP	ACTION
1	Look through the worksheet to see what problems the training observer(s) found during the observation. Note: Problems will usually be indicated by NO answers on the worksheet. They will also usually have comments added. There will be questions where problems are indicated by YES answers. Example: OBSERVATIONS / YES / NO / NA / COMMENTS 37. Were the tasks demonstrated by the instructor? / / ✓ / / In this example, there was a problem with question 37.
2	Find the exact page on which the particular question is covered. Example: TOPIC / PAGE Modifying the Training Process—Worksheet 3 / Training Observation Questions / Questions 26 Through 32: Lecture Events—Training Objective / 4-9 Questions 33 Through 36: Lecture Events—Terminology / 4-12 Questions 37 Through 42: Demonstration / 4-14 Questions 43 Through 53: Practice / 4-17 Questions 54 Through 58: Feedback / 4-20 In this example, question 37 is covered on page 4-14.

Continued on next page

Procedure (continued)

STEP	ACTION
3	Use the Recommendation Checklist to determine which modification to recommend. Example: Recommendation checklist Use this table to find the correct recommendations for questions 37 through 42.

IF question...	Is checked...	THEN modify the program by using recommendation...
37	No	A
38	No	
39	No	B
40	No	C
41	No	D
42	No	E

In this example, the correct recommendation for question 37 is A.

SECTION THREE
MODIFYING THE TRAINING ENVIRONMENT--WORKSHEET 2

OVERVIEW

Introduction

This section of the job aid examines Worksheet 2, Training Environment and explains which recommendations to make in the evaluation.

In this section

SECTION THREE: MODIFYING THE TRAINING ENVIRONMENT--WORKSHEET 2	PAGE
Modifying the Training Environment--Worksheet 2	3-2
Training Environment Questions	3-3
Questions 1 Through 2: Number of Instructors	3-6
Questions 3 Through 7: Training Equipment	3-8
Questions 8 Through 15: Training Site	3-10
Questions 16 Through 22: Training Distractions	3-12
Questions 23 Through 25: Training Duration	3-15

MODIFYING THE TRAINING ENVIRONMENT - WORKSHEET 2

Introduction

This part of the job aid is to be used with the training observer's Worksheet 2.

The worksheet asks the observer to carefully answer questions and write comments about the training environment. The questions include the

- number of instructors
- training equipment
- training site
- training distractions, and
- training duration.

The Training Analyst can use the worksheet and comments to modify and improve the training environment.

How to use

To find out how to use this part of the job aid, see page 2-3.

TRAINING ENVIRONMENT QUESTIONS

In this section

In this section we will look at 25 questions on Worksheet 2 that can help you modify the training environment in which a training program takes place.

AREA	PAGE
Number of Instructors	3-6
Training Equipment	3-8
Training Site	3-10
Training Distractions	3-12
Training Duration	3-15

The worksheet questions

The following 25 questions are the questions you will use to recommend modifications for the training program. Each one of them is covered in greater detail on the following pages.

QUESTIONS	PAGE
NUMBER OF INSTRUCTORS	
1. Were enough instructors present to provide adequate supervision and assistance?	3-6
2. Did you see any soldier wanting an instructor, but none were available?	3-6
TRAINING EQUIPMENT	
3. Was the training equipment specifed in the lesson plan used in the training?	3-8
4. Was there enough training equipment to go around?	3-8
5. Did the training equipment work properly?	3-8
6. Was the equipment necessary for training readily available when needed?	3-8
7. Did each soldier receive a copy of handouts or other materials to be used?	3-8

Continued on next page

The worksheet questions (continued)

QUESTIONS	PAGE
TRAINING SITE	
8. Could all soldiers see and hear the instruction?	3-10
9. Did the soldiers have enough elbow room?	3-10
10. Was the physical layout of the training environment conducive for demonstrations or audio-visuals?	3-10
11. Was the training site quiet enough to hear the instructor?	3-10
12. Did the noise in the training area distract soldiers and make hearing the instructor difficult?	3-10
13. Is this a poor training site from the standpoint of noise distractions?	3-10
14. Was there enough light for you to see what was going on?	3-10
15. Was there enough light for the soldiers to see what was going on?	3-10
TRAINING DISTRACTIONS	
16. Were there observers at the training site other than yourself?	3-12
17. Were soldiers distracted by the presence of civilian observers or high ranking officers?	3-12
18. Was training interrupted at any time?	3-12
19. Was any training left out as the result of an interruption?	3-12

Continued on next page

TRAINING ENVIRONMENT QUESTIONS, Continued

The worksheet questions (continued)

QUESTIONS	PAGE
TRAINING DISTRACTIONS, continued	
20. Did the soldiers complain a lot about the weather during training?	3-12
21. Were the weather conditions so uncomfortable that soldiers were distracted from training?	3-12
22. Were weather conditions at the training site so bad that training was seriously affected?	3-12
TRAINING DURATION	
23. Did the instructors cover all the training events in the allotted time?	3-15
24. Was training so long that soldiers became bored or so short that instructors were cutting practice time?	3-15
25. Was the allotted training time too short or too long for the training objectives?	3-15

QUESTIONS 1 THROUGH 2: NUMBER OF INSTRUCTORS

Introduction

A sufficient number of instructors are necessary during training in order for soldiers to

- perform the tasks within the allotted time
- have assistant instructors available for one-on-one hands-on performance, and
- have instructors available to provide feedback.

Questions

The questions in this section are as follows:

1. Were enough instructors present to provide adequate supervision and assistance?
2. Did you see any soldier wanting an instructor, but none were available?

Recommendation checklist

Use this table to find the correct recommendations for questions 1 or 2.

IF question...	Is checked...	THEN change the training by using recommendation...
1	No	A
2	Yes	

Recommendation A: provide more instuctors

If there are not enough instructors/assistant instructors assigned to training, then providing a sufficient number of instructors/assistant instructors should be recommended.

Note: Check the lesson plan to find out how many instructors/assistant instructors are needed during the training.

Continued on next page

Lengthen training sessions	If providing more instructors/assistant instructors in the required numbers is <u>not</u> possible, then the training sessions should be made longer so that each soldier receives one-on-one training during practice activities. <u>Example:</u> Two instructors training four soldiers in 60 minutes (30 minutes per soldier) can be changed to one instructor training 4 soldiers in 120 minutes (30 minutes per soldier).
Modifying the training objective	If the time and the number of instructors cannot be modified, then the training objective must be modified to reflect what can be trained with the given resources.

QUESTIONS 3 THROUGH 7: TRAINING EQUIPMENT

Introduction

Training equipment includes everything that the soldier needs for practicing or learning a task performance.

There must be enough properly working training equipment available for each soldier to get hands-on practice to standard.

Questions

The questions in this section of the worksheet are as follows:

3. Was the training equipment specified in the lesson plan used in the training?

4. Was there enough training equipment to go around?

5. Did the training equipment work properly?

6. Was the equipment necessary for training readily available when needed?

7. Did each soldier receive a copy of handouts or other materials used?

Recommendation checklist

Use this table to find the correct recommendation for questions 3 through 7.

IF question...	Is checked...	THEN change the training by using recommendation...
3	No	A
4	No	B
5	No	C
6	No	D
7	No	B

Recommendation A: required equipment not used

If the training equipment specified in the lesson plan is not available for training, then it is recommended that

- steps be taken to ensure its availability from now on, or
- the training be redesigned and the lesson plan rewritten to fit whatever equipment is available.

Continued on next page

Recommendation B: not enough training equipment/ materials

If soldiers must wait to use training equipment, then it is recommended concurrent training stations be set up and manned by a separate set of instructors. (see Section One, General Information).

Note: This procedure may be necessary for large, expensive items like tanks or trucks.

If soldiers do not have or must share handouts or other training materials, it is recommended that the number of handouts necessary for the training be determined in advance.

Recommendation C: equipment not working properly

When training equipment does not work properly, it creates problems by

- not permitting adequate practice
- undermining soldiers' confidence in their equipment and their instuctors' competence.

If the training equipment does not work properly, it is recommended that the equipment be secured in advance by instructors and checked out to make sure it works properly.

Recommendation D: equipment not available

If required training equipment is not available when needed, then it is recommended that enough time be allowed before training to get the equipment needed.

QUESTIONS 8 THROUGH 15: TRAINING SITE

Introduction

For effective training, a training site must provide soldiers with the following:

- enough training space
- low noise levels
- enough lighting, and
- no distractions.

A good training site will actually help soldiers to learn.

Questions

The questions in this section of the worksheet are as follows:

8. Could all soldiers see and hear the instruction?

9. Did the soldiers have enough elbow room?

10. Did the physical layout of the training environment make seeing demonstrations or audiovisuals difficult?

11. Was the training site so noisy that you had trouble hearing the instructor?

12. Did the noise in the training area distract soldiers and make hearing the instructor difficult?

13. Is this a poor training site from the standpoint of noise distractions?

14. Was there enough light for you to see what was going on?

15. Was there enough light for the soldiers to see what was going on?

Continued on next page

Recommendation checklist

Use this table if to find the correct recommendations for questions 16 through 22.

IF question...	**Is checked...**	**THEN change the training by using recommendation...**
8	No	A
9	No	
10	Yes	
11	Yes	B
12	Yes	
13	Yes	
14	No	C
15	No	

Recommendation A: not enough space

If a training site does not provide enough space for each soldier to see and hear comfortably, then it is recommended that a new, larger site be obtained for future training.

Note: If a new site cannot be obtained, then the number of soldiers per instructor should be reduced to add more space to the current site.

Recommendation B: site too noisy

If a training site is too noisy for soldiers to hear instructions clearly, then it is recommended that a new training site be obtained.

Note: Noisy environments hinder effective training. Soldiers should learn tasks in a quiet environment, but can practice the task in a noisy environment if that is a condition.

Recommendation C: poor lighting

If a training site has poor lighting, and soldiers cannot clearly see what is going on during training, then it is recommended that

- a new site be obtained with improved lighting, or
- the current site be improved with better lighting.

Note: Reduced visibility might be a condition for the active performance of a task, but the soldier should first learn at a site that has no problems with lighting. The soldier can perform the task under the condition of reduced visibility during practice.

QUESTIONS 16 THROUGH 22: TRAINING DISTRACTIONS

Introduction

Interruptions during training affect a soldier's skill and knowledge of a task performance.

Training should not be interrupted by any of the following:

- equipment failure
- instructor absence
- inclement weather

- VIP orientations
- high ranking observers, or
- administrative requirements.

Questions

The questions in this section of the worksheet are as follows:

16. Were there observers at the training site other than yourself?

17. Were soldiers distracted by the presence of civilian observers or high ranking officers?

18. Was training interrupted at any time?

19. Was any training left out as the result of an interruption?

20. Did the soldiers complain a lot about the weather during training?

21. Were the weather conditions so uncomfortable that soldiers were distracted from training?

22. Were weather conditions at the training site so bad that training was seriously affected?

Continued on next page

Recommendation checklist

Use this table to find the correct recommendations for questions 16 through 22.

IF question...	**IS checked...**	**THEN change the training by using recommendation...**
16	No	A
17	No	
18	No	B
19	No	
20	No	C
21	No	
22	No	

Recommendation A: distractions

If visitors to the training site interrupt soldiers during training, then it is recommended that steps be taken to close the site to anyone who does not belong there.

Note: The instructional staff has little control over visitors. It may be necessary to schedule additional training if visitors were so distracting that they interrupted the training.

Recommendation B: training interrupted

Proper planning can often prevent training from being interrupted. To find out more information about an interruption that occurred during training, talk to the following people:

- training observer
- soldiers, and/or
- instructors.

If the interruption was serious, then additional training may have to be scheduled.

Continued on next page

Recommendation C: bad weather

If the weather is bad enough to affect training, then it is recommended that the training be

- postponed or
- moved to a sheltered site.

Note: Training can take place outdoors during bad weather conditions but the training time should be lengthened. Sheltered sites can be set up for concurrent training sessions. Soldiers and instructors can be shuttled back and forth and training can take place during several short sessions.

Practice can take place during bad weather once the tasks have been learned. The amount of time a soldier is exposed to bad weather can be shortened.

QUESTIONS 23 THROUGH 25: TRAINING DURATION

Introduction

Training time must never be

- too short so that instructors rush through the training or overlook some events
- too long so that the soldiers get bored or there is a lot of idle time.

Either extreme is bad, with shortened training time harder to correct.

Questions

The questions in this section are as follows:

23. Did the instructors cover all the training events in the allotted time?

24. Was training so long that soldiers became bored or so short that instructors were cutting practice time?

25. Was the allotted training time too short or too long for the training objectives?

Recommendation checklist

Use this table to find the correct recommendations for questions 23 through 25.

IF question...	Is checked...	THEN change the training by using recommendation...
23	No	A
24	Yes	B
25	Yes	C

Continued on next page

Recommendation A: not enough training time

The following table shows how to correct problems which result from not enough training time:

IF the training event does not have enough time because...	**THEN it is recommended that...**
the instructor is not familiar with the training materials	instructors rehearse prior to a training event.
the instructor has too many training events scheduled for the time allotted	the instructor add more training time or more training sites. Note: Reducing the number of training events is not an acceptable solution.
the lesson plan is inefficient	the analyst see • General Problems and Recommendations, page 1-7, and • time allotment check, page 3-17.

Recommendation B: time too long or short

If training time is too long, then it is recommended that the training time be shortened gradually until the instructors find the best amount of time for the training event.

If training time is too short, then it is recommended the time be lengthened for future training.

Note: For soldiers who took part in a training event which was too short, more training time must be scheduled.

Recommendation C: alloted time too long or short

It is recommended that the training developer always be notified if the allotted training time is too long or too short. The training developer can then make any necessary adjustments to the allotted time.

Note: The lesson plan should accurately specify the amount of training time needed for a soldier to reach the training objective.

Continued on next page

Time allotment check

Use the following procedure to check if the minimum allotted time is used in the training of a task. This procedure can be used for Recommendation A, B or C.

Note: If you cannot get the figures needed to do this arithmetic, then the training has not been carefully planned and the lesson plan needs to be revised, See Job Aid for Evaluating Lesson Plan.

STEP	ACTION
1	Find the following information in the lesson plan: • how many soldiers will be at each training site • how long the general classroom instruction will be for soldiers • how long each individual instruction will be for a soldier • what the task standard for time will be • how many practices to the standard will be required. Example: In the lesson plan you find that there must be: • five soldiers at each training site • thirty minutes of general classroom instruction • ten minutes of individual instruction • ten minutes maximum to perform a task to the standard • two practices to the standard.

Continued on next page

Time allotment check (continued)

STEP	ACTION
2	Multiply the following to find the TOTAL amount of individual instruction time needed: • how many soldiers will be at the training site from step 1, multiplied by • how long each individual instruction will be for a soldier from step 1, equals • the TOTAL amount of individual instruction time needed for training a task. Example: Multiply: 5 (the number of soldiers at each training site) times 10 (the number of minutes of individual instruction) equals 50 (TOTAL number of minutes for individual instruction).
3	Multiply the following to find the TOTAL amount of time needed for soldiers to practice to the standard: • How many soldiers will be at each training site, from step 1, multiplied by • what the task standard for time will be from step 1, multiplied by • how many practices to the standard will be required, equals • the TOTAL time needed for practice to the standard. Example: Multiply: 5 (the number of soldiers at each training site) times 10 (the number of minutes to perform the task to the standard) times 2 (number of practices required to the standard) equals 100 (TOTAL number of minutes of practice to the standard).

Continued on next page

Time allotment check (continued)

STEP	ACTION
4	Add the following to find the TOTAL amount of training time needed for learning a task performance <u>without</u> breaks: • how long the general classroom instruction will be from step 1, <u>added to</u> • the TOTAL amount of individual instruction time needed for training a task from step 2, <u>added to</u> • the TOTAL amount of time needed for practice to the standard from step 3, <u>equals</u> • the TOTAL time needed for learning a task performance <u>without</u> scheduled breaks. <u>Example</u>: Add 30 (the number of minutes for general classroom instruction) plus 50 (the TOTAL number of minutes for individual instruction) plus 100 (the TOTAL number of minutes needed to practice to the standard) equals 180 (TOTAL number of minutes needed to learn a task performance <u>without</u> scheduled breaks).
5	Add the following if breaks are scheduled during training: • How long the breaks will be, <u>added to</u> • the TOTAL time needed for learning a task performance without scheduled breaks from step 4, <u>equals</u> • minimum allotted training time for a task. <u>Example</u>: 30 (number of minutes for 3 scheduled ten minute breaks) plus 180 (total number of minutes needed for learning a task perforance) equals 210 minutes minimum allotted training time for a task).
6	Compare the minimum allotted training time to the actual time used for training.

SECTION FOUR
MODIFYING THE TRAINING PROCESS--WORKSHEET 3

OVERVIEW

Introduction

This section of the job aid examines Worksheet 3, Training Process, and explains which recommendations to make in the evaluation.

In this section

SECTION FOUR: MODIFYING THE TRAINING PROCESS--WORKSHEET 3	PAGE
Modifying the Training Process--Worksheet 3	4-2
Training Observation Questions	4-3
Questions 26 Through 32: Lecture Events--Training Objective	4-9
Questions 33 Through 36: Lecture Events--Terminology	4-12
Questions 37 Through 42: Demonstration	4-14
Questions 43 Through 53: Practice	4-17
Questions 54 Through 58: Feedback	4-21
Questions 59 Through 61: Job Aids	4-23
Question 62: Training Events	4-24
Questions 63 Through 72: General Observations--Lesson Plan	4-25
Questions 73 Through 75: General Observations--Training Aids	4-30
Questions 76 Through 87: General Observations--Instructors	4-32
Questions 88 Through 89: Training Duration	4-36

MODIFYING THE TRAINING PROCESS—WORKSHEET 3

Introduction

This part of the job aid is to be used with the training observers Worksheet 3.

The worksheet asks the observer to carefully answer questions and write comments about the training. The questions include the:

- lecture events
- demonstrations
- practice

- instructor's feedback
- job aids, and
- training events.

The Training Analyst can use the worksheet and comments to modify and improve the training program.

How to use

To find out how to use this part of the job aid, see page 2-3.

TRAINING OBSERVATION QUESTIONS

In this section

In this section we will look at 64 questions on Worksheet 3 that can help you modify the actual training for a training program.

AREA	PAGES
LECTURE EVENTS - TRAINING OBJECTIVES	4-9
LECTURE EVENTS - TERMINOLOGY	4-12
DEMONSTRATIONS	4-14
PRACTICE	4-17
FEEDBACK	4-21
JOB AIDS	4-23
TRAINING EVENTS	4-24
GENERAL OBSERVATIONS - TRAINING PLAN	4-25
GENERAL OBSERVATIONS - TRAINING AIDS	4-30
GENERAL OBSERVATIONS - INSTRUCTORS	4-32
GENERAL OBSERVATIONS - TRAINING DURATION	4-36

The worksheet questions

The following 64 questions are the questions you will use to recommend modifications for the training program. Each one of them is covered in greater detail on the following pages.

QUESTION	PAGE
LECTURE EVENTS - TRAINING OBJECTIVE	
26. Were soldiers told the training objectives?	4-9
27. Were the soldiers told the training objectives, including tasks, conditions, and standards?	4-9
28. Were soldiers told why this training is necessary?	4-9

Continued on next page

The worksheet questions (continued)

QUESTION		PAGE
29.	Were soldiers told how this task fits in with their eventual job duties?	4-9
30.	Were soldiers told how this training fits in with previous and future training?	4-9
31.	Were soldiers told what would happen to them if they did (or did not) learn this task?	4-9
32.	Did soldiers have a training schedule available to them?	4-9
LECTURE EVENTS - TERMINOLOGY		
33.	Did the instructor question the soldiers about what they were already supposed to know?	4-12
34.	Did the instructor tell the soldiers how the equipment worked and label the parts?	4-12
35.	Did the instructor define terms new to the soldier and identify newly introduced equipment?	4-12
36.	Did the instructor provide the concepts and terminology needed by the soldiers?	4-12
DEMONSTRATIONS		
37.	Were the tasks demonstrated by the instructor?	4-14
38.	Was each subtask demonstrated?	4-14
39.	Were demonstrations conducted on the actual equipment?	4-14
40.	Could demonstrations be seen and heard by all soldiers?	4-14
41.	Were demonstrations conducted in small enough steps so that the soldiers could easily follow the instructor's actions?	4-14
42.	Did the instructor ask the soldiers for questions immediately following the demonstration?	4-14

Continued on next page

The worksheet questions (continued)

QUESTION		PAGE
PRACTICE		
43.	Did all soldiers practice?	4-17
44.	Were soldiers initially allowed to practice subtasks in isolation from one another?	4-17
45.	Was the practice on each subtask hands-on using the actual equipment?	4-17
46.	Were soldiers required to practice subtasks under the various conditions that they are likely to encounter on the job?	4-17
47.	Did each soldier practice each subtask to standard, unassisted, before going on to whole-task practice?	4-17
48.	Were the soldiers allowed to practice the task as a whole (i.e., practicing the subtasks together)?	4-17
49.	Were the soldiers required to meet the overall standard in performing the entire task unassisted?	4-17
50.	Did a lot of soldiers have trouble with the same step during practice?	4-17
51.	Was sufficient repetition allowed during practice?	4-17
52.	Did every soldier practice under the direct supervision of an instructor?	4-17
53.	Was remedial training scheduled for the soldiers who had not performed to standard during practice?	4-17

Continued on next page

The worksheet questions (continued)

QUESTION	PAGE
FEEDBACK	
54. Were soldiers told what they were doing right or wrong during practice?	4-21
55. Was feedback provided as soon as possible following actions?	4-21
56. Was feedback specific to actions and free of ridicule?	4-21
57. Was faulty performance identified and corrected?	4-21
58. Was the amount of feedback given a soldier gradually reduced as the soldier progressed?	4-21
JOB AIDS	
59. Were job aids given to the soldiers at the beginning of training?	4-23
60. Did the instructor require the soldiers to use job aids as prescribed in the lesson plan?	4-23
61. Did the job aids appear to be accurate and beneficial to the soldiers?	4-23
TRAINING EVENTS	
62. Did the training events progress from lecture to demonstration to practice?	4-24
GENERAL OBSERVATIONS - TRAINING PLAN	
63. Did the instructor follow the lesson plan?	4-25
64. Were training aids and training materials called for in the lesson plan actually used?	4-25
65. Did the instructor follow the sequence on the lesson plan worksheet?	4-25
66. Was the instructor's presentation well organized?	4-25

Continued on next page

The worksheet questions (continued)

QUESTION	PAGE
67. Were basic rules and standard procedures presented before exceptions?	4-25
68. Were critical discriminations emphasized?	4-25
69. Did the training focus on how to do something rather than talking about what to do?	4-25
70. Were soldiers sometimes standing around with nothing to do during training?	4-25
71. Did the instructor seem to have enough time to conduct the training as planned?	4-25
72. Did the instructor give a summary?	4-25
GENERAL OBSERVATIONS - TRAINING AIDS	
73. Did the instructor use the training aids effectively?	4-30
74. Were the training aids accurate?	4-30
75. Did the training aids seem to confuse the soldiers?	4-30
GENERAL OBSERVATIONS - INSTRUCTORS	
76. Did the instructor move smoothly from one learning activity to the next?	4-32
77. Did the instructor emphasize what the soldiers need to know?	4-32
78. Did the instructor include material that is not in the lesson plan?	4-32
79. Did the instructor minimize unnecessary detail and refrain from telling unrelated "war stories"?	4-32
80. Were soldiers encouraged to actively participate (i.e., questioning, discussing, performing) during training?	4-32

Continued on next page

The worksheet questions (continued)

QUESTION	PAGE
81. Did the instructor ask the soldiers if they had any questions during lecture, demonstration, and practice?	4-32
82. Did the instructor set a tone which encouraged soldier questioning?	4-32
83. Did the instructor answer the soldiers' questions?	4-32
84. Did the instructor answer all the soldiers' questions?	4-32
85. Did the instructor answer all the soldiers' questions to their satisfaction?	4-32
86. Did the instructor use class time efficiently?	4-32
87. Did the instructor show a positive attitude towards the training and the soldiers?	4-32
GENERAL OBSERVATIONS - TRAINING DURATION	
88. Did the class sessions start and end on time?	4-36
89. Was the actual training time somewhat shorter than the time allotted?	4-36

QUESTIONS 26 THROUGH 32: LECTURE EVENTS—TRAINING OBJECTIVE

Introduction

A soldier must be told prior to training

- what the training objectives are
- what the purpose of the training is
- how the training fits in with the rest of the course
- what the consequences for learning or not learning a task performance are.

Questions

The questions in this section are as follows:

26. Were soldiers told the training objectives?
27. Were the soldiers told the training objectives, including tasks, conditions, and standards?
28. Were soldiers told why this training is necessary?
29. Were soldiers told how this task fits in with their eventual job duties?
30. Were soldiers told how this training fits in with previous and future training?
31. Were soldiers told what would happen to them if they did (or did not) learn this task?
32. Did soldiers have a training schedule available to them?

Continued on next page

Recommendation checklist

Use this table to find the correct recommendations for questions 26 through 32.

IF question...	Is checked...	THEN modify the program by using recommendation...
26	No	A
27	No	
28	No	B
29	No	C
30	No	
31	No	D
32	No	E

Recommendation A: training objectives not given

If the soldiers were not given the training objectives in a clear and understandable format, then it is recommended the instructor give the objective in the three parts outlined in the lesson plan.

The lesson plan should contain all three parts of the objective, which are the

- tasks
- conditions, and
- standards.

Recommendation B: no training purpose given

If the purpose of the training is not given to the soldiers, then it is recommended the instructor tell the soldiers why they are learning a task.

Note: If the purpose of the training cannot be explained, then the training should not be given to the soldiers.

Recommendation C: how training fits in not given

Soldiers learn better if they see a logical progression in the training events.

An explanation on how the training fits in with other training is necessary for the soldiers.

It is recommended that the instructor make sure this explanation is given prior to training.

Continued on next page

Recommendation D: learning consequences

All rewards for learning a task must be told to the soldiers.

All penalties for <u>not</u> learning a task must be told to the soldiers.

It is recommended these consequences be explained prior to training in order to provide learning motivation for the soldiers.

Recommendation E: <u>no</u> training schedule

The instructor should make sure a training schedule is readily available to the soldiers.

It is recommended that the soldiers know in advance

- where they will have to be
- what they will be doing
- what uniforms they will wear, <u>and</u>
- when they will be on duty.

<u>Note</u>: Frequent changes to the training schedule should be avoided.

QUESTIONS 33 THROUGH 36: LECTURE EVENTS—TERMINOLOGY

Introduction

The instructor should present the concepts and terminology soldiers need to know for training in a clear and understandable manner.

There are two stages to presenting the concepts and terminology.

First, the instructor must determine if the soldiers already know certain knowledge and skills prior to training.

Second, the instructor must teach the terms and concepts needed to train a task performance.

Questions

The questions in this section are as follows:

33. Did the instructor question the soldiers about what they were already supposed to know?

34. Did the instructor tell the soldiers how the equipment worked and label the parts?

35. Did the instructor define terms new to the soldier and identify newly introduced equipment?

36. Did the instructor provide the concepts and terminology needed by the soldiers?

Recommendation checklist

Use this table to find the correct recommendations for questions 33 through 36.

IF question...	Is checked...	THEN modify the program by using recommendation...
33	No	A
34	No	B
35	No	
36	No	

Continued on next page

Recommendation A: required knowledge not assessed

Prior to each training event, an instructor should

- pretest the soldiers on the knowledge and skills they are supposed to know, or
- ask the soldier enough questions to make sure they know the required knowledge and skills.

It is recommended that an instructor always pretest or question soldiers about required knowledge and skills for a training event.

IF the instructor...	THEN it is recommended that...
pretests or questions the soldiers about required skills and knowledge, and they do not know them	the training be modified to include additional training on the knowledge and skills the soldiers need.
does not pretest or question the soldiers about required skills and knowledge	the instructor be retrained.

Recommendation B: ineffective teaching

It is recommended that instructors always question the soldiers following a lecture or discussion to see if they have learned the required terms and concepts.

The instructor should teach the soldier about terms and concepts by

- naming and labelling things
- introducing equipment
- explaining the working relationships between parts
- establishing the required readings on gauges and dials
- introducing rules and strategies, and
- explaining underlying concepts.

QUESTIONS 37 THROUGH 42: DEMONSTRATION

Introduction

An instructor should demonstrate a task for the soldiers in the most effective manner.

All tasks should be demonstrated either

- by an instructor
- by a film, or
- by a series of slides.

Note: Technical or operator's manuals can be used to help with a demonstration but should not substitute a live or filmed demonstration.

Questions

The questions in this section are as follows:

37. Were the tasks demonstrated by the instructor?

38. Was each subtask demonstrated?

39. Were demonstrations conducted on the actual lesson plan?

40. Could demonstrations be seen and heard by all soldiers?

41. Were demonstrations conducted in small enough steps so that the soldiers could easily follow the instructor's actions?

42. Did the instructor ask the soldiers for questions immediately following the demonstration?

Recommendation checklist

Use this table to find the correct recommendations for questions 37 through 42.

IF question...	Is checked...	THEN modify the program by using recommendation...
37	No	A
38	No	
39	No	B
40	No	C
41	No	D
42	No	E

Continued on next page

Recommendation A: subtasks/tasks not demonstrated

It is recommended that training demonstrations be given to the soldiers whenever it is possible.

Substitutions like the following can be used if it is absolutely necessary:

- films
- slides, or
- other visual aids.

Substitutions such as talk-throughs or walk-throughs should be used only if they are followed by extensive practice with feedback by the instructor.

Recommendation B: demonstrations not on proper equipment

It is recommended that the observer note the equipment used for the demonstration so that the same equipment is used throughout training and testing. The same equipment must be used from demonstration to practice to test.

Note: The equipment should be listed in the lesson plan.

Recommendation C: demonstrations not seen/heard

It is recommended that an instructor redesign the demonstration if the soldiers cannot see, hear or understand the demonstration properly.

If the problem is with the training site, then you should see Worksheet 2, Training Site, page 3-10.

Recommendation D: demonstrations not given in small steps

It is recommended that the instructors

- organize the information or steps of a demonstration, and
- include it in the lesson plan.

A lesson plan must be written with all the necessary information and steps for giving a demonstration.

Note: Instructors need to change a lesson plan when they must backtrack to add information to the demonstration.

Continued on next page

Recommendation E: questions <u>not</u> encouraged	It is recommended the instructor encourage questions from soldiers following a demonstration. If no questions are asked, then the instructor should ask the soldiers questions to make sure they understand what was done at the demonstration.

QUESTIONS 43 THROUGH 53: PRACTICE

Introduction

Practice is when a soldier gives a hands-on performance of a task, supervised by an instructor/assistant instructor during training.

Soldiers will not learn to perform a task unless they practice. Each task and subtask must be performed until the soldier meets the training standard under the training conditions as specified in the lesson plan.

A task performance to standard must be reached by a soldier at least once without assistance.

Note: Meeting a standard once is a minimum. For more difficult tasks, soldiers should demonstrate a task two or three times to standard in order to remember it properly.

Questions

The questions in this section are as follows:

43. Did all soldiers practice?

44. Were soldiers initially allowed to practice subtasks in isolation from one another?

45. Was the practice on each subtask hands-on using the actual equipment?

46. Were soldiers required to practice subtasks under the various conditions that they are likely to encounter on the job?

47. Did each soldier practice each subtask to standard, unassisted, before going on to whole-task practice?

48. Were the soldiers allowed to practice the task as a whole (i.e., practicing the subtasks together)?

49. Were the soldiers required to meet the overall standard in performing the entire task unassisted?

50. Did a number of soldiers have trouble with the same step during practice?

51. Was sufficient repetition allowed during practice?

52. Did every soldier practice under the direct supervision of an instructor?

53. Was remedial training scheduled for the soldiers who had not performed to standard during practice?

Continued on next page

Recommendation checklist

Use this table to find the correct recommendations for questions 43 through 53.

IF question...	IS checked...	THEN modify the program by using recommendation...
43	No	A
44	No	B
45	No	
46	No	
47	No	
48	No	C
49	No	
50	Yes	D
51	No	E
52	No	F
53	No	G

Continued on next page

Recommendation A: no practice

All soldiers must practice.

Note: If 10 soldiers are scheduled for practice and only nine soldiers practiced, then all of the soldiers did not practice.

Use this table to help correct problems which result in no practice for some or all the soldiers:

IF all the soldiers did not practice because...	THEN it is recommended that...
resources were not available	• the instructor find the necessary resources and • the training manager schedule another practice.
not enough time was scheduled	the training manager • schedule more time for practice, or • add additional training sites to accommodate the practice time allotted.
not enough instructors were present	• schedule additional practice time or • assign additional instructors

Recommendation B: subtasks not practiced

It is recommended that all soldiers practice each subtask of a task to the standard.

Important: Soldiers must have subtask practice before progressing in training to whole task practice. If the soldiers do not become skilled with subtasks, they will not become skilled with whole tasks.

Recommendation C: whole task not practiced

It is recommended that all soldiers practice a whole task to the standard.

Note: All soldiers should meet the conditions and standards listed in the training objective.

Continued on next page

Recommendation D: soldiers had trouble during practice

It is recommended that the entire training process be investigated to find out why the soldiers were having trouble with the same step during practice.

When the problem is found, then the necessary modifications should be made to the lesson plans.

Note: This problem must be investigated by going over Worksheets 1, 2 and 3.

Recommendation E: not enough practice

Soldiers did not receive enough practice if all soldiers did not practice each subtask and task until they could perform:

- to the standard
- under the training conditions, and
- without assistance from instructors or assistant instructors.

It is recommended that enough training time and all the necessary resources be provided for every soldier to practice each subtask and task.

Recommendation F: no instructor present

It is recommended each soldier practice under the direct supervision of an instructor.

Enough instructors must be provided for practice. (See Worksheet 2--Questions 1 and 2.)

Recommendation G: no remedial training

If some soldiers do not master the task in the time allotted, then it is recommended that remedial training be scheduled for those soldiers.

This additional training must be scheduled and must be given.

Note: Less than 10 percent of the soldiers usually need remedial training. If more than 10 percent need remedial training, then there may be other training problems.

QUESTIONS 54 THROUGH 58: FEEDBACK

Introduction

Soldiers should be told if they performed a subtask or task correctly or incorrectly during practice. All criticisms should be positive and constructive.

During the early stages of training, this feedback is important in learning the task steps and how they fit together. It also gives the soldiers an idea on how the subtasks fit in with the whole task.

Questions

The questions in this section are as follows:

54. Were soldiers told what they were doing right or wrong during practice?

55. Was feedback provided as soon as possible following actions?

56. Was feedback specific to actions and free of ridicule?

57. Was faulty performance identified and corrected?

58. Was the amount of feedback given a soldier gradually reduced as the soldier progressed?

Recommendation checklist

Use this table to find the correct recommendations for questions 54 through 58.

IF question...	IS checked...	THEN modify the program by using recommendation...
54	No	A
55	No	
56	No	B
57	No	C
48	No	D

Recommendation A: feedback not given

If feedback is not given during practice, then it is recommended that feedback be given by an instructor as soon as possible following practice of a subtask or task.

Continued on next page

Recommendation B: feedback <u>not</u> ridicule free	If the instructor ridicules a soldier during practice for the performance of an action, then it is recommended the instructor focus on the actions, <u>not</u> on the person performing the actions. <u>Remember</u>: Feedback should encourage a soldier.
Recommendation C: faulty performance <u>not</u> identified	If the instructor does <u>not</u> identify and correct soldier performance errors, then it is recommended the instructor make sure practice is closely monitored <u>and</u> all soldier performance errors identified and corrected. <u>Remember</u>: Soldiers should <u>not</u> progress in training until they give an error-free performance at least once.
Recommendation D: feedback <u>not</u> reduced	After the soldiers practice a task performance for a period of time, they will learn • what to do • what <u>not</u> to do, <u>and</u> • how to decide for themselves that it is a correct performance. It is recommended that the instructor reduce the amount of feedback as practice progresses <u>or</u> the soldiers will continue to rely on the instructors judgment instead of their own.

QUESTIONS 59 THROUGH 61: JOB AIDS

Introduction

Job aids which will be used to perform a task should be given to soldiers at the start of training.

The use of accurate job aids should be the focus of any training.

Questions

The questions in this section are as follows:

59. Were job aids given to the soldiers at the beginning of training?

60. Did the instructor require the soldiers to use job aids as prescribed in the lesson plan?

61. Did the job aids appear to be accurate and beneficial to the soldiers?

Recommendation checklist

Use this table to find the correct recommendation for questions 59 through 61.

IF question...	**IS checked...**	**THEN modify the program by using recommendation...**
59	No	A
60	No	
61	No	B

Recommendation A: job aid <u>not</u> primary part of training

If the primary part of training a task is <u>not</u> the use of the job aid, then it is recommended the training program be redesigned to focus on the job aid.

<u>Remember</u>: The primary emphasis of a training program with a job aid should be on the job aid and <u>not</u> the task performance.

<u>Example</u>: Maintenance personnel should be taught to use manuals and associated tools to repair equipment rather than being taught to perform repair functions only.

Recommendation B: job aids <u>not</u> accurate

If a job aid is inaccurate <u>or</u> not much help to the soldiers, then it is recommended that the job aids <u>not</u> be used.

It is also recommended that the training be changed until new job aids are produced.

QUESTION 62: TRAINING EVENTS

Introduction

Training events should progress according to the following steps in order to help a soldier learn a task performance:

- a lecture
- a demonstration
- a practice session.

Question

The question in this section is as follows:

62. Did the training events progress from lecture to demonstration to practice?

Recommendation checklist

Use this table to find the correct recommendation for question 62.

IF question...	IS checked...	THEN modify the program by using recommendation...
62	No	A

Recommendation A: training events not following steps

It is recommended that training for all subtasks and tasks follow the lecture-demonstration-practice steps to help a soldier learn a task performance.

Note: The training cycle should follow the lecture-demonstration-practice sequence for each subtask or step separately before it is repeated for a whole task.

QUESTIONS 63 THROUGH 72: GENERAL OBSERVATIONS—LESSON PLAN

Introduction

An instructor should follow the lesson plan when training soldiers to learn a task.

The lesson plan should layout in detail the training objectives to be met by the soldiers.

This set of questions deals with modifying the use of the lesson plan.

If the way the lesson plan is written needs to be modified, then you should see the Job Aid for the Evaluation of Lesson Plans.

Questions

The questions in this section are as follows:

63. Did the instructor follow the lesson plan?

64. Were training aids and training materials called for in the lesson plan actually used?

65. Did the instructor follow the sequence on the lesson plan worksheet?

66. Was the instructor's presentation well organized?

67. Were basic rules and standard procedures presented before exceptions?

68. Were critical discriminations emphasized?

69. Did the training focus on how to do something rather than talking about what to do?

70. Were soldiers sometimes standing around with nothing to do during training?

71. Did the instructor seem to have enough time to conduct the training as planned?

72. Did the instructor give a summary?

Continued on next page

Recommendation checklist

Use this table to find the correct recommendations for questions 63 through 72.

IF question...	**IS checked...**	**THEN modify the program by using recommendation...**
63	No	A
64	No	
65	No	B
66	No	
67	no	C
68	no	D
69	No	E
70	Yes	F
71	No	G
72	No	H

Continued on next page

Recommendation A: training did not follow lesson plan

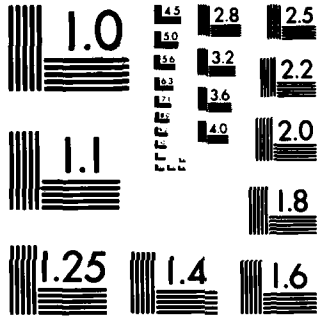
The lesson plan is not followed during training. Use this table to find the problem and recommended modification.

PROBLEM	RECOMMENDATION
The lesson plan does not follow the requirements defined in a Job Aid for the Evaluation of Lesson Plans.	The lesson plan must be rewritten.
The instructor feels the lesson plan is inaccurate or does not provide good training.	The lesson plan must be changed with the inaccurate items eliminated.
The instructor is inexperienced in training the task specified in the lesson plan.	The instructor must be scheduled for training.
Training materials or equipment specified in the lesson plan are not used.	The instructor must find out if the material or equipment is available 24 hours prior to training.
Training materials or equipment specified in the lesson plan are not available.	The instructor must revise the lesson plan to include materials and equipment which are available.

Continued on next page

AD-A145 077 HOW TO EVALUATE TRAINING(U) IMPERIAL IRANIAN GROUND FORCES COMBAT RESEARCH AND EVALUATION CENTER 30 SEP 82 DAAG29-18-D-0100 4/4

UNCLASSIFIED F/G 5/9 NL



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

Recommendation B: poorly organized training

Instructors must conduct their training based on the steps outlined in the lesson plan.

When the training is poorly organized, then it is recommended that

- the lesson plan be changed, or
- the training be checked with the training development personnel.

Recommendation C: basic rules not presented first

The lesson plan should list the basic rules of a task and the exception to the rules.

It is recommended that the instructor always present

- the basic rules first, then
- the exceptions to the rules.

Recommendation D: critical discriminations not emphasized

Critical discriminations should be identified in the lesson plan.

If no emphasis is given to critical discriminations by an instructor, then it is recommended the instructor emphasize the critical discriminations during training by

- pointing them out to soldiers
- identifying them as a separate subtask or step
- demonstrating the various cues for them, and
- making the soldiers practice them.

Remember: Critical discriminations show if the soldiers know what actions to take in a specified case and what is/is not required.

Recommendation E: more talking than doing

The lesson plan should focus on doing a task rather than talking about a task performance.

If the lesson plan does not focus on doing a task, then it is recommended that the problem be brought to the attention of the training developer so the lesson plan can be redesigned.

Continued on next page

Recommendation F: soldiers idle during training

A lesson plan should not allow any soldier to be standing idle during training.

Exception: If a break is scheduled for the soldiers, then at that time they may be unoccupied.

If any soldier is idle during training, then it is recommended that the lesson plan be changed so no soldier is idle during training except for breaks.

Recommendation G: not enough training time

If the soldiers do not have enough training time to learn how to perform a task to standard, then it is recommended the time allotted for the training events be studied to find out why there wasn't enough time.

If the time allotted is then considered inadequate for learning a task, then the scheduled time must be changed in the lesson plan.

Recommendation H: no training summary

The lesson plan should specify that a summary be given.

It is recommended that a summary be given by an instructor following the training of a task.

Note: A summary should remind a soldier of the task just taught and the important points of the lesson.

QUESTIONS 73 THROUGH 75: GENERAL OBSERVATIONS—TRAINING AIDS

Introduction

Training aids must be

- accurate
- used effectively, and
- understood by soldiers.

Training aids must add something useful and/or important to the training.

Questions

The questions in this section are as follows:

73. Did the instructor use the training aids effectively?

74. Were the training aids accurate?

75. Did the training aids seem to confuse the soldiers?

Recommendation checklist

Use this table to find the correct recommendations for questions 73 through 75.

IF question...	IS checked...	THEN modify the program by using recommendation...
73	No	A
74	No	B
75	Yes	C

Recommendation A: ineffective training aids

Guidelines for the use of training aids should be in the lesson plan.

If the instructor finds no guidelines, then it is recommended that guidelines for the training aids be added to the lesson plan.

Instructors learn how to follow the lesson plan guidelines as part of their Instructor Training Course.

If an instructor has not attended the course, then it is recommended that the instructor be scheduled to take the course at the earliest possible time.

Continued on next page

Recommendation B: inaccurate training aids	Inaccurate training aids will confuse a soldier and undermine his confidence of instructors. If a training aid is inaccurate, then it is recommended that the training aids be revised. The revisions to training aids should be done before existing aids become inaccurate.
Recommendation C: confusing training aids	If a training aid does not help a soldier to learn a task, then it is recommended that • the training aid be revised, and/or • the instruction be redesigned.

QUESTIONS 76 THROUGH 87: GENERAL OBSERVATIONS—INSTRUCTORS

Introduction

All instructors should attend the Instructor Training Course.

The instructor must demonstrate a good grasp on how to conduct effective training after taking the course.

Questions

The questions in this section are as follows:

76. Did the instructor move smoothly from one learning activity to the next?

77. Did the instructor emphasize what the soldiers need to know?

78. Did the instructor include material that is not in the lesson plan?

79. Did the instructor minimize unnecessary detail and refrain from telling unrelated war stories?

80. Were soldiers encouraged to actively participate (i.e., questioning, discussing, performing) during training?

81. Did the instructor ask the soldiers if they had any questions during lecture, demonstration, and practice?

82. Did the instructor set a tone which encouraged soldier questioning?

83. Did the instructor answer the soldiers' questions?

84. Did the instructor answer all the soldiers' questions?

85. Did the instructor answer all the soldiers' questions to their satisfaction?

86. Did the instructor use class time efficiently?

87. Did the instructor show a positive attitude toward the training and the soldiers?

Continued on next page

Recommendation checklist

Use this table to find the correct recommendations for questions 76 through 87.

IF question...	IS checked...	THEN modify the program by using recommendation...
76	No	A
77	No	B
78	Yes	
79	No	
80	No	C
81	NO	
82	NO	
83	NO	D
84	NO	
85	NO	
86	NO	E
87	NO	F

Recommendation A: instructor did not teach smoothly

It is recommended that the instructor teach the soldiers a task performance by using the following sequence:

- tell the soldiers what training objectives they should have met and why
- tell the soldiers what training objective they are being trained to meet and why
- tell the soldiers what their next training objective will be and why.

The instructor should also give a short summary of their training sequence when the training is finished.

Continued on next page

Recommendation B: instructor did not follow lesson plan

It is recommended that the instructor always follow the content of the lesson plan.

The lesson plan should be changed if additions or deletions are necessary due to

- equipment changes
- doctrine changes
- new or revised publications, and
- new training guidance.

Note: The training developer should make the changes as soon as possible.

Recommendation C: questions not encouraged

An instructor should encourage questions when teaching a task performance to soldiers.

It is recommended that an instructor always

- ask the soldiers if there are any questions about the training, or
- ask the soldiers questions to make sure they are keeping up with the training.

Note: The instructor must never assume that he or she is being understood if the soldiers ask no questions.

Recommendation D: questions not answered

An instructor should be able to answer all questions or obtain answers to questions in order to give the soldier confidence in the training.

It is recommended that if an instructor cannot answer most of the soldiers questions, then the instructor's superiors should be notified that the instructor may not be qualified to teach this lesson.

Continued on next page

Recommendation E: inefficient use of class time

Inefficient use of class time includes the following:

- soldiers standing around waiting to practice
- class time being used to set up training equipment
- class time being used to distribute training materials which soldiers were supposed to have prior to training
- breaks coming too often
- training stops too early despite the fact that all soldiers were not trained to standard.

If inefficient use of class time is the problem, then it is recommended that the instructor follow the lesson plan.

If the lesson plan is <u>not</u> providing proper training guidance for an instructor, then it is recommended that the lesson plan be redesigned.

If the instructor is the cause of the inefficient use of class time, then

- the instructor needs remedial training on "how to train", <u>and</u>
- the training manager needs to exercise more control over the training process.

Recommendation F: negative instructor attitude

It is recommended that an instructor <u>always</u> exhibit a positive attitude towards

- the training
- the soldiers, <u>and</u>
- themselves.

If an instructor continually demonstrates a poor attitude, then it is recommended that the instructor be considered for removal from instructor duties.

This should be done to an instructor no matter how friendly, entertaining or technically proficient he or she might be.

QUESTIONS 88 THROUGH 89: TRAINING DURATION

Introduction

Training time should be carefully determined by training development personnel through test trials of the training program.

The allotted time for training should be designed to bring 90 to 95 percent of the soldiers to standard.

Longer training time can be justified by

- large classes, or
- classes that did not show proficiency in prerequisite tasks.

Shorter training time can be justified only when all the soldiers have met the standard before the allotted time ran out.

Questions

The questions in this section are as follows:

88. *Did the class sessions start and end on time?*

89. Was the actual training time somewhat shorter or longer than the time allotted?

Recommendation checklist

Use this table to find the correct recommendation for questions 88 or 89.

IF question...	IS checked...	THEN modify the program by using recommendation...
88	No	A
89	Yes	

Recommendation A: training time shorter/ longer than allotted time

Training time should be designed so that most of the soldiers can become skilled in a task.

If the training time is shorter or longer than the allotted time in the lesson plan, it should be recommended that the instructor be asked why the time was shorter or longer.

Once the instructor is asked about the training time, then you can figure out what must be done to correct a problem that might exist with the allotted time from the lesson plan.

SECTION FIVE
MODIFYING THE TESTING PROCESS—WORKSHEET 4

OVERVIEW

Introduction

This section of the job aid examines Worksheet 4, Testing, and explains which recommendations to make in the evaluation.

In this section

SECTION FIVE: MODIFYING THE TESTING PROCESS—WORKSHEET 4	PAGE
Modifying the Training Process--Worksheet 4	5-2
Testing Observation Questions	5-3
Questions 90 Through 93: Test Instructions	5-6
Questions 94 Through 98: Matching Testing and Training	5-8
Questions 99 Through 102: Test Realism	5-11
Questions 103 Through 106: Testing Procedures	5-13
Questions 107 Through 109: Test Feedback	5-15

MODIFYING THE TESTING PROCESS--WORKSHEET 4

Introduction

This part of the job aid is to be used with the training observer's Worksheet 4.

The worksheet asks the observer to carefully answer questions and write comments about the testing process. The questions include the

- test instructions
- test tasks, conditions and standards
- test realism
- test procedures, and
- test feedback.

The Training Analyst will use the worksheet and comments to modify and improve the testing process.

How to use

To find out how to use this part of the job aid, see page 2-3.

TESTING OBSERVATION QUESTIONS

In this section

In this section we will look at the 20 questions on Worksheet 4 that can help you modify the testing process for a training program.

AREA	PAGE
Test Instructions	5-5
Matching Testing and Training	5-7
Test Realism	5-10
Testing Procedures	5-12
Test Feedback	5-14

The worksheet questions

The following 20 questions are the questions you will use to recommend modifications for the training program. Each one of them is covered in greater detail on the following pages.

QUESTION	PAGE
TEST INSTRUCTIONS	
90. Did the examiner read the test instructions directly from the lesson plan?	5-5
91. Were the test instructions stated clearly enough for the soldiers to know what they were expected to do?	5-5
92. Were pass/fail standards provided to the soldiers?	5-5
93. Were pass/fail standards clearly explained such that soldiers would know when they performed correctly?	5-5

Continued on next page

TESTING OBSERVATION QUESTIONS, Continued

The worksheet questions (continued)

	QUESTION	PAGE
	MATCHING TESTING AND TRAINING	
94.	Did the test occur soon after the completion of training?	5-7
95.	Were all tasks specified in the training objectives tested?	5-7
96.	Were soldiers tested on any tasks that were not taught?	5-7
97.	Were the testing conditions the same as the training conditions?	5-7
98.	Were the standards specified in the training objectives used to score test performance?	5-7
	TEST REALISM	
99.	Were critical decisions and difficult actions required on the job omitted from the test?	5-10
100.	Were critical discriminations included on the test?	5-10
101.	Did the test come as close as possible to measuring performance as it would occur under actual job conditions?	5-10
102.	Did the test require that the soldiers perform tasks together that must be performed as a unit on the job?	5-10
	TESTING PROCEDURES	
103.	Did the same person act as both examiner and instructor?	5-12
104.	Did the examiner help the soldiers in any way during the test?	5-12

Continued on next page

TESTING OBSERVATION QUESTIONS, Continued

The worksheet questions (continued)

QUESTION		PAGE
105.	Did the examiners apply the standards specified in the training objectives consistently and objectively?	5-12
106.	Did the soldiers receive artificial cues or help during the test?	5-12
TEST FEEDBACK		
107.	Were soldiers told what they did right and wrong on the test?	5-14
108.	Was feedback given as soon as possible after the test?	5-14
109.	Was feedback specific to the soldier's actions and free of ridicule?	5-14

QUESTIONS 90 THROUGH 93: TEST INSTRUCTIONS

Instructions

The test instructions given to the soldiers at the beginning of the test should be clear and understandable.

The soldiers should know

- what they are expected to do, and
- how well they are expected to do it.

Questions

The questions in this section are as follows:

90. Did the examiner read the test instructions directly from the lesson plan?

91. Were the test instructions stated clearly enough for the soldiers to know what they were expected to do?

92. Were pass/fail standards provided to the soldiers?

93. Were pass/fail standards clearly explained such that soldiers would know when they performed correctly?

Recommendation checklist

Use this table if there were any *NO answers* on the worksheet for any of questions 73 through 75.

IF question...	IS checked...	THEN modify the program by using recommendation...
90	No	A
91	No	
92	No	B
93	No	

Recommendation A: unclear test instructions

If the soldiers did not understand the test instructions, then it is recommended that the instructions be rewritten.

Note: Any rewritten instructions should be tried out with a sampling of soldiers prior to their use.

Continued on next page

Recommendation B: unclear pass/fail standards	A trained soldier is one who knows when a task performance is at or above the lesson plan standard. Standard for a task should be given prior to testing and should be the same standards used during practice. If a soldier is not able to translate the standards into the specific time and/or accuracy levels required for the task, then it is recommended that the standards in the lesson plan be rewritten.

QUESTIONS 94 THROUGH 98: MATCHING TESTING AND TRAINING

Introduction

The tasks, conditions and standards for the tests must match the training tasks, conditions and standards.

The purpose of a test is to determine if a soldier is skilled with the tasks in the training objective.

So the test must be a measure of the training objective.

Questions

The questions in this section are as follows:

94. Did the test occur soon after the completion of training?

95. Were all tasks specified in the training objectives tested?

96. Were soldiers tested on any tasks that were not taught?

97. Were the testing conditions the same as the training conditions?

98. Were the standards specified in the training objectives used to score test performance?

Recommendation checklist

Use this table to find the correct recommendations for questions 94 through 98.

IF question...	IS checked...	THEN modify the program by using recommendation...
94	No	A
95	No	
96	Yes	B
97	No	C
98	No	D

Continued on next page

Recommendation A: test occurs long after training

It is recommended that the testing of a task performance occur as close as possible to the end of the training of that task.

An individual test for a task shows the instructor how well the training program is preparing the soldiers.

A post training comprehension test shows what skills the soldiers have gained after the training program.

Both tests should occur as close to the ending of training as possible.

Example: The following is the best testing sequence:

- train A, test A
- train B, test B
- train C, test C
- give comprehensive test on A, B, and C.

Recommendation B: trained tasks not tested

The instructor should always test soldiers on the tasks trained.

If tasks are left out of training, then the tasks should not be tested until they are trained.

If a task is left out of testing, then the task should be tested as soon as possible.

The training objectives should outline what is tested.

Continued on next page

Recommendation C: testing conditions different

The condition statement in the training objective should determine the conditions for training and testing.

IF the condition...	**THEN...**
cannot be set up for some reason	the reason should be investigated.
cannot be set up because the materials and/or facilities specified in the lesson plan will not be available	the training and testing conditions should be redesigned for available materials and/or facilities.
cannot match training conditions	• the soldier performance will differ in testing from training, and • the training objective must be changed so conditions for training and testing match.

Recommendation D: test standards different

The test and training standards must be the same. The training objective contains the test and training standards.

The standards must be written clearly and specify how well the soldiers must perform a task to receive a GO.

If test and training standards are not the same, then it is recommended that the standards be rewritten so they are the same.

If the test and training standards are not written so that the soldiers understand them, then it is recommended that the standards in the training objective be rewritten.

If the training objective calls for the wrong standard for testing, then it is recommended that the training objective be rewritten.

QUESTIONS 99 THROUGH 102: TEST REALISM

Introduction

The test must accurately simulate the real job conditions and requirements.

These conditions and requirements will come from the training objective in the lesson plan.

The training objective must specify accurately the tasks and conditions in order for the soldiers to test under real job requirements and conditions.

Questions

The questions in this section are as follows:

99. Were critical decisions and difficult actions required on the job omitted from the test?

100. Were critical discriminations included on the test?

101. Did the test come as close as possible to measuring performance as it would occur under actual job conditions?

102. Did the test require that soldiers perform tasks together that must be performed as a unit on the job?

Recommendation checklist

Use this table to find the correct recommendations for questions 99 through 102.

IF question...	IS checked...	THEN modify the program by using recommendation...
99	Yes	A
100	No	B
101	No	C
102	Yes	

Recommendation A: critical decisions/ difficult actions not on test

Critical decisions show if a soldier knows when to take an action.

Difficult actions show if a soldier knows how to do complicated actions.

It is recommended that all critical decisions and difficult actions be included on the test if they help measure a soldier's mastery of the training objectives in the lesson plan.

Continued on next page

Recommendation B: critical discriminations not on test	Critical discriminations show if a soldier knows when an action is required and when an action is not required. It is recommended that all critical discriminations be included on the test. A true test of the training objectives will require the inclusion of critical discriminations.
Recommendation C: test and job requirements differ	A test should always approximate job requirements. If the training observers found that the test and job requirements differ, then it is recommended that the training developer be told to see if a realistic test can be developed. Note: The training observer should always be asked why the test and job requirements differ.

QUESTIONS 103 THROUGH 106: TESTING PROCEDURES

Introduction

Soldiers should not be helped by anyone during the test.

An examiner should never

- give hints, prompts or cues, or
- apply the standards inconsistently.

A test is a measure of how well a soldier performs without the aid of outside sources.

A soldier should always be evaluated for a test by the standards in the training objective.

Each soldier should receive the same test using the same standards.

Questions

The questions in this section are as follows:

103. Did the same person act as both examiner and instructor?

104. Did the examiner help the soldiers in any way during the test?

105. Did the examiner apply the standards specified in the training objectives consistently and objectively?

106. Did the soldiers receive artificial cues or help during the test?

Recommendation checklist

Use this table to find the correct recommendations for questions 103 through 106.

IF question...	IS checked...	THEN modify the program by using recommendation...
103	Yes	A
104	Yes	B
105	No	C
106	Yes	B

Continued on next page

Recommendation A: instructors/examiners were same persons

The instructor who trains the soldiers should not test them.

It is recommended that the examiner <u>not</u> have a role in training and the instructor <u>not</u> have a role in testing.

Recommendation B: examiners helped soldiers

An examiner must <u>never</u> help soldiers during a test.

If an examiner is found helping soldiers during a test then it is recommended that the examiner receive training in test administration.

<u>Note</u>: The problem here may be with the training management and this problem can be solved at the next level in the chain of command <u>or</u> you may have to tailor the recommendation to the reason for the help.

Recommendation C: standards <u>not</u> applied consistently

Every soldier must be evaluated using the same standards during a test.

Test scores should <u>not</u> be used if the test standards were applied inconsistently during a test.

If the examiner applied the standards inconsistently during the test, then it is recommended that you find out why the standards were applied inconsistently <u>and</u> suggest how to correct the problem.

QUESTIONS 107 THROUGH 109: TEST FEEDBACK

Introduction

Soldiers must receive feedback on their test performance.

Soldiers should receive feedback on a test as soon as possible after a test is completed.

The soldiers should be told

- what they did right, and
- what they did wrong.

Questions

The questions in this section are as follows:

107. Were soldiers told what they did right and wrong on the test?

108. Was feedback given as soon as possible after the test?

109. Was feedback specific to the soldier's actions and free of ridicule?

Recommendation checklist

Use this table to find the correct recommendation for questions 107 through 109.

IF question...	IS checked...	THEN modify the program by using recommendation...
107	No	A
108	No	B
109	no	C

Continued on next page

Recommendation A: no test feedback

Soldiers should not leave a test site wondering what they did correctly or incorrectly.

It is recommended that time be included in the testing schedule for

- going over the soldier's test performance
- covering each subtask
- telling the soldier if the subtask was performed to standard or not to standard.

If an examiner does not give feedback even though time permits, it is recommended that the examiner be given training on test administration procedures.

Recommendation B: test feedback delayed

Soldiers should be told what they did right and what they did wrong as soon as the test is over.

If time is not scheduled for feedback immediately following the test, then the agency controlling the training schedule should add time for this requirement.

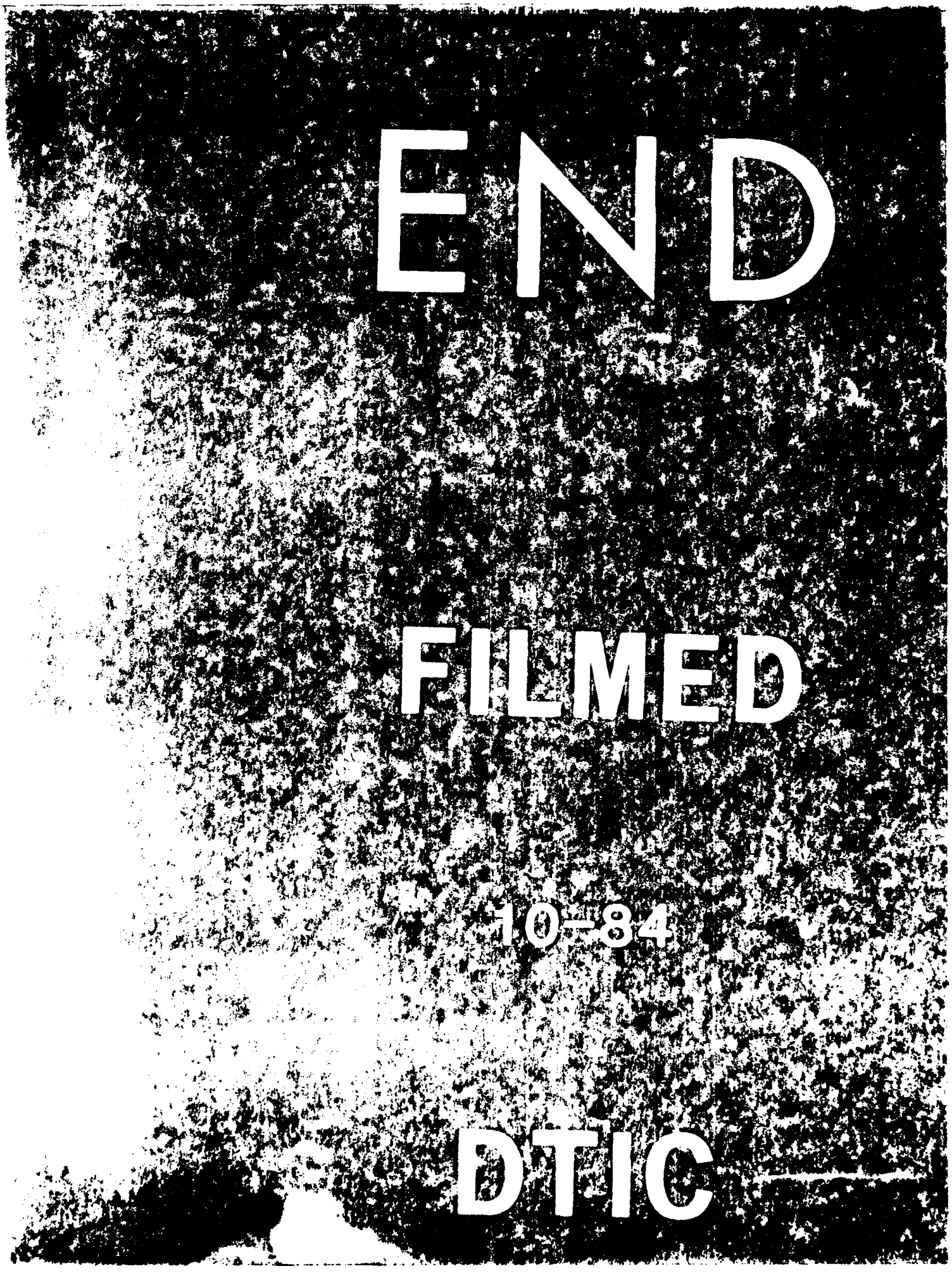
Recommendation C: feedback not specific or ridicule free

An instructor must provide feedback following a test which:

- reinforces correct actions, and
- modifies incorrect actions.

The feedback should be free of ridicule and focus on the soldier's actions and knowledge.

It is recommended that examiners who give degrading or non-specific feedback be provided with training on correct test administration procedures.


END
FILMED
10-84
DTIC